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Section IV
Alkyds

CARGILL, INC.: Long Oil Alkyds:

General Purpose Trade Sales and Industrial:

50 5000:
% N.V. by Wt.: 60
Solvent: MS
Viscosity: Y-Z1
Reduced Viscosity: K-N @ 50%
Max Color: 7
Max. Acid No. (Solids Basis): 12.5
W.P.G.: 7.75
Type Oil: Soya
High viscosity long oil alkyd, improved dry properties. Versatile resin, coatings can be formulated from satin to high gloss finishes.

50 5004:
% N.V. by Wt.: 40
Solvent: OMS
Viscosity: M-Q
Max Color: 10
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.15
Type Oil: Soya
High quality long oil alkyd in an odorless solvent. Available at 45% nvm.

50 5048:
% N.V. by Wt.: 60
Solvent: MS
Viscosity: U-W
Max Color: 8
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.70
Type Oil: TOFA
60% N.V. version of 50 5091 for easier bulk handling.

50 5054:
% N.V. by Wt.: 70
Solvent: MS
Viscosity: Z-Z3
Reduced Viscosity: C-F @ 50% N.V.
Max Color: 9
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.00
Type Oil: Linseed
A long oil linseed alkyd with good drying properties. Used in enamels and general maintenance coatings. TT-R-266d, type II, Class A.

CARGILL, INC.: Long Oil Alkyds(Continued):

General Purpose Trade Sales and Industrial(Continued):

50 5060:
% N.V. by Wt.: 60
Solvent: MS
Viscosity: U-W
Reduced Viscosity: C-F @ 50% N.V.
Max Color: 7
Max Acid No. (Solids Basis): 12.5
W.P.G.: 7.70
Type Oil: Soya
60% N.V. version of 50 5070 for easier bulk handling. Meets the requirements of TT-R-266-d, Type 1, Class B.

50 5065:
% N.V. by Wt.: 60
Solvent: OMS
Viscosity: Z-Z2
Reduced Viscosity: C-F @ 40% N.V.
Max Color: 7
Max Acid No. (Solids Basis): 12.5
W.P.G.: 7.58
Type Oil: Soya
Basically a 50 5070 resin in an odorless solvent. Meets the requirements of TT-P-30E.

50 5070:
% N.V. by Wt.: 70
Solvent: MS
Viscosity: Z-Z4
Reduced Viscosity: C-F @ 50% N.V.
Max Color: 7
Max Acid No. (Solids Basis): 10
W.P.G.: 7.95
Type Oil: Soya
Meets the requirements of TT-R-266-d, Type 1, Class A. A work horse alkyd for high quality exterior or interior enamels.

50 5071:
% N.V. by Wt.: 70
Solvent: MS
Viscosity: Z4-Z6
Reduced Viscosity: F-I @ 50% N.V.
Max Color: 8
Max Acid No. (Solids Basis): 10
W.P.G.: 7.95
Type Oil: Soya
High drink version of 50 5070.

CARGILL, INC.: Long Oil Alkyds(Continued):

General Purpose Trade Sales and Industrial(Continued):

50 5074:
% N.V. by Wt.: 70
Solvent: MS
Viscosity: R-T
Reduced Viscosity: A3-B @ 50%
Max Color: 7
Max. Acid No. (Solids Basis): 8.5
W.P.G.: 7.70
Type Oil: Soya
A soya isophthalic alkyd which features excellent exterior durability.

50 5076:
% N.V. by Wt.: 70
Solvent: OMS
Viscosity: Z1-Z2
Reduced Viscosity: D-F @ 50% N.V.
Max Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.90
Type Oil: Soya
A versatile resin in an odorless solvent at 70% N.V.

50 5081:
% N.V. by Wt.: 60
Solvent: MS
Viscosity: U-W
Reduced Viscosity: C-F @ 50% N.V.
Max Color: 7
Max. Acid No. (Solids Basis): 12.5
W.P.G.: 7.70
Type Oil: Sun
A high quality sunflower alkyd used in a wide variety of trade sales and general maintenance coatings.

50 5091:
% N.V. by Wt.: 70
Solvent: MS
Viscosity: Z3-Z5
Reduced Viscosity: C-E @ 50% N.V.
Max Color: 7
Max. Acid No. (Solids Basis): 11.4
W.P.G.: 7.95
Type Oil: TOFA
TOFA version of 50 5070 that meets the requirements of TT-R-266-d, Type V, Class A.

CARGILL, INC.: Long Oil Alkyds(Continued):

General Purpose Trade Sales and Industrial(Continued):

50 5092:
% N.V. by Wt.: 60
Solvent: MS
Viscosity: W-Y
Reduced Viscosity: E-G @ 50% N.V.
Max Color: 6
Max. Acid No. (Solids Basis): 10.0
W.P.G.: 7.7
Type Oil: TOFA
TOFA version of 50 5060 with a high reduced viscosity.

50 5097:
% N.V. by Wt.: 80
Solvent: Mild Aromatic TS-28R
Viscosity: X-Z1
Max Color: 10
Max. Acid No. (Solids Basis): 15-20
W.P.G.: 8.30
Type Oil: TOFA
Versatile grinding vehicle. Compatible with most resins & polymers.

50 5080:
% N.V. by Wt.: 70
Solvent: Xylene
Viscosity: O-S
Max Color: 12
Max. Acid No. (Solids Basis): 5-10
W.P.G.: 8.00
Type Oil: Soya
Vehicle to meet the requirements of TT-R-266-d, Type I, Class C.

CARGILL, INC.: Long Oil Alkyds(Continued):

Latex Modifiers:

55 5501:
% N.V. by Wt.: 98.5 Min.
Viscosity: Z1-Z3
Max Color: 10
Max Acid No. (Solids Basis): 5
W.P.G.: 8.40
Type Oil: Soya
Type Acid: PA
Versatile very long alkyd at 98% solids. Used as a modifier in latex and oil based stains and paints.

55 5503:
% N.V. by Wt.: 98 Min.
Viscosity: X-Z3
Max Color: 10
Max Acid No. (Solids Basis): 8
W.P.G.: 8.45
Type Oil: TOFA
Type Acid: IPA
Very long oil alkyd for use as a modifier for latex and oil based paints and stains.

48 5521:
% N.V. by Wt.: 99
Viscosity: Y-Z1
Max Color: 7
Max. Acid No. (Solids Basis): 6-10
W.P.G.: 8.4
Type Oil: Linseed
Type Acid: IPA
#1 Lithographic ink resin.

CARGILL, INC.: Medium Oil Alkyds:

General Purpose Industrial or Maintenance:

51 5103:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: Z1-Z3
Reduced Viscosity: C-F @ 35%
Max. Color: 8
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.65
Oil: Linseed
Versatile linseed alkyd with rapid hard and through dry. It is also an excellent grinding vehicle.

51 5114:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: V-Y
Reduced Viscosity: C-F @ 40% N.V.
Max. Color: 7
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.50
Oil: Soya/Linseed
Used in air dry primers and enamels. Good polyurethane compability.

51 5127:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: X-Z
Reduced Viscosity: E-H @ 40% MS
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.50
Oil: Soya
Medium oil alkyd with good flattening efficiency.

51 5135:
% N.V. by Wt.: 50
Solvent: VM&P
Viscosity: Z2-Z4
Reduced Viscosity: N-Q @ 40% N.V.
Max. Color: 7
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.50
Oil: Soya
A very durable, fast drying medium alkyd used in implement and structural coatings.

CARGILL, INC.: Medium Oil Alkyds(Continued):

General Purpose Industrial or Maintenance(Continued):

51 5141:
% N.V. by Wt.: 55
Solvent: MS
Viscosity: Z2-Z4
Reduced Viscosity: U-Z @ 50% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 5-12
W.P.G.: 7.70
Oil: Soya/Linseed
Used in air dry brushable industrial maintenance coatings. Can be reduced to 50% nvm to meet the requirements of TT-R-266-d, Type III.

51 5156:
% N.V. by Wt.: 55
Solvent: MS
Viscosity: Z2-Z4
Reduced Viscosity: U-Z @ 50% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 5-12
W.P.G.: 7.70
Oil: Soya/Linseed
Used in air dry brushable industrial maintenance coatings. Can be reduced to 50% nvm to meet the requirements of TT-R-266-d, Type III.

51 5178:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: Y-Z2
Reduced Viscosity: J-M @ 40% N.V.
Max. Color: 7
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.50
Oil: TOFA
TOFA version of 51 5184.

51 5184:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: Z-Z2
Reduced Viscosity: J-M @ 40% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.60
Oil: Soya
A general purpose medium alkyd with excellent drying and working properties. Possesses excellent gloss and color retention.

CARGILL, INC.: Medium Oil Alkyds(Continued):

General Purpose Industrial or Maintenance(Continued):

51 5186:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: Z4-Z6+
Reduced Viscosity: C-F @ 35% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.60
Oil: TOFA
TOFA version of 51 5187.

51 5187:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: Z4-Z6+
Reduced Viscosity: C-F @ 35% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.60
Oil: Soya
A high drink medium alkyd.

51 5196:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: V-Y
Reduced Viscosity: D-G @ 40% N.V.
Max. Color: 7
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.65
Oil: Soya
Isophthalic medium-long resin with excellent exterior durability. Used in a wide variety of interior and exterior trade sales and industrial applications.

51 7602:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: Z-Z2
Max. Color: 9
Max. Acid No. (Solids Basis): 25
W.P.G.: 7.90
Oil: Linseed
A medium alkyd with fast wetting and fast drying properties. It makes an excellent metal primer or enamel.

CARGILL, INC.: Medium Oil Alkyds(Continued):

General Purpose Industrial or Maintenance(Continued):

51 7619:
% N.V. by Wt.: 60
Solvent: MS/VM&P/Isobutanol
Viscosity: Z1-Z4
Reduced Viscosity: J-L @ 50% N.V.
Max. Color: 10
Max. Acid No. (Solids Basis): 10-16
W.P.G.: 8.00
Oil: Soya
Features good flexibility and adhesion and a positive air dry. Used in air dry primers and enamels.

51 7633:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: U-W
Max. Color: 7
Max. Acid No. (Solids Basis): 14
W.P.G.: 7.60
Oil: TOFA
A general purpose medium oil alkyd with excellent drying properties.

51 7645:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: Z2-Z4
Max. Color: 8
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.60
Oil: Soya/Tung
Modified with Tung Oil to speed up dry, ideal for fast air dry enamels for interior and exterior applications.

51 7647:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: S-U
Max. Color: 8
Max. Acid No. (Solids Basis): 13
W.P.G.: 8.30
Oil: TOFA
A shorter oil length non-drying alkyd resin recommended for use in high quality nitrocellulose lacquers.

CARGILL, INC.: Medium Oil Alkyds(Continued):

Chain-Stopped:

51 5110:
% N.V. By Wt.: 50
Solvent: MS/EEP
Viscosity: Z4-Z6
Reduced Viscosity: S-V @ 35% N.V. in M.S.
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.63
Oil: Soya
A chain stopped medium alkyd with excellent pigment wetting properties. Well suited for high gloss, durable exterior coatings. Available @ 40% nonvolatile as 51 7631.

51 5119:
% N.V. by Wt.: 50
Solvent: VM&P
Viscosity: Z2-Z4
Reduced Viscosity: R-V @ 40% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.45
Oil: Soya
Forms a durable coating with a fast dry. Used for industrial product coatings and implement coatings.

Traffic Alkyds:

54 5465:
% N.V. by Wt.: 61
Solvent: VM&P
Viscosity: Z4-Z7
Reduced Viscosity: T-V @ 50% N.V.
Max. Color: 8 @ 45% N.V.
Max. Acid No. (Solids Basis): 8
W.P.G.: 7.70
Oil: Soya
General purpose traffic alkyd that meets Texas traffic alkyd requirements.
TTA

CARGILL, INC.: Medium Oil Alkyds(Continued):

Traffic Alkyds(Continued):

54 5472:
% N.V. by Wt.: 65
Solvent: VM&P/Toluene
Viscosity: Z2-Z4
Reduced Viscosity: T-V @ 50% N.V.
Max. Color: 8
Max. Acid No. (Solids Basis): 8.0
W.P.G.: 8.33
Oil: Soya
Traffic alkyd offering fast drying characteristics and good gloss.

54 5475:
% N.V. by Wt.: 50
Solvent: VM&P
Viscosity: Z1-Z3
Max. Color: 7
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.40
Oil: Soya
Meets Colorado traffic requirements. Has excellent speed of dry, abrasion resistance and color retention properties. Recommended as a good general purpose traffic alkyd or where fast solvent release is required in wood or metal finishes. CTA

54 5482:
% N.V. by Wt.: 61
Solvent: Toluene
Viscosity: G-I
Max. Color: 7
Max. Acid No. (Solids Basis): 10.0
W.P.G.: 8.1
Oil: Soya
Traffic alkyd offering fast dry and good gloss for road marking paint.

Flat Wall Alkyd:

56 5603:
% N.V. by Wt.: 30
Solvent: OMS
Viscosity: W-Z
Reduced Viscosity: G-J @ 25% N.V. OMS
Max. Color: 7
Max. Acid No. (Solids Basis): 10
W.P.G.: 6.95
Oil: TOFA
Flat wall alkyd. Provides good dry, excellent holdout and good soil removal. In odorless solvent.

CARGILL, INC.: Medium Oil Alkyds(Continued):

Thixotropic Vehicles:

56 5640:
% N.V. by Wt.: 40
Solvent: Mineral Spirits
Brookfield Viscosity @ 77F: 1,200,000-1,600,000 cps
Max. Color: 11
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.25
Type Oil: Soybean/TOFA
56 5640 is a 40% nonvolatile oxidizing medium oil thixotropic alkyd designed to be used as a 20-25% modification of the vehicle in flat, satin and semi-gloss interior or exterior enamels. The gel structure is hard, which imparts good thixotropy and ease of application.

56 5650:
% N.V. by Wt.: 50
Solvent: Mineral Spirits
Brookfield Viscosity @ 77F: 1,200,000-1,600,000 cps
Max. Color: 12
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.50
Type Oil: Soybean/TOFA
56 5650 is a 50% nonvolatile version of 56 5640.

56 5662:
% N.V. by Wt.: 60
Solvent: Mineral Spirits
Max. Color: 8
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.90
Type Oil: Mixed
56 5662 is a thixotropic alkyd which is used as a modifier in other alkyds, to impart a controlled consistency to clear and pigmented coatings or in stains.

56 5663:
% N.V. by Wt.: 45
Solvent: Mineral Spirits
Max. Color: 8
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.4
Type Oil: Mixed
56 5663 is a thixotropic alkyd used as a modifier in other alkyds to improve consistency to clear and pigmented coatings.

CARGILL, INC.: Medium Oil Alkyds(Continued):

Thixotropic Vehicles(Continued):

56 5670:
% N.V. by Wt.: 70
Solvent: Mineral Spirits
Brookfield Viscosity @ 77F: 650,000-850,000 cps
Max. Color: 8
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.90
Type Oil: Soybean
56 5670 is a 70% nonvolatile oxidizing medium to long oil thixotropic alkyd designed to be used as the sole vehicle or 50% of the vehicle in satin, semi gloss and gloss interior or exterior enamels. The gel structure is soft, which allows for easy handling, yet imparts good rheology, non settling and brushing properties.

56 5691:
% N.V. by Wt.: 70
Solvent: Mineral Spirits
Brookfield Viscosity @ 77F: 25,000-35,000 cps
Max. Color: 7
Max. Acid No. (Solids Basis): 9-13
W.P.G.: 7.85
Type Oil: TOFA/Soybean
56 5691 is a 70% nonvolatile oxidizing thixotropic alkyd, designed to be used as the sole vehicle or as a modifier in interior or exterior enemels.

57 5767:
% N.V. by Wt.: 90
Solvent: Mineral Spirits/Xylol
Brookfield Viscosity @ 77F: Reduced 70% in M.S. H-K
Max. Color: 7
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.20
Type Oil: Oxidizing
57 5767 is a thixotropic long oil alkyd at 90% solids designed for both interior and exterior architectural coatings which can be formulated to meet voc levels of <250 g/l.

CARGILL, INC.: Medium Oil Alkyds(Continued):

Water Extendable Alkyds:

51 7680:
% N.V. by Wt.: 50
Solvent: MS
Viscosity: Y-Z2
Max. Color: 7
Max. Acid No. (Solids Basis): 14
W.P.G.: 7.6
Oil: Mixed
Water extendable alkyd.

Rosin and/or Phenolic Modified:

51 5144:
% N.V. by Wt.: 60
Solvent: VM&P/Toluol/n-Butyl Alcohol
Viscosity: Z3-Z4
Reduced Viscosity: D-G @ 40% VM&P
Max. Color: 10
Max. Acid No. (Solids Basis): 20
W.P.G.: 8.0
Type Oil: Linseed
Very fast dry rosin and phenolic modified alkyd.

CARGILL, INC.: Short Oil Alkyds:

Non-Oxidizing--For Baking Applications or Plasticizers for Nitrocellulose:

52 5205:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: Z3-Z5
Reduced Viscosity: C-F @ 40% in Xylene
Max. Color: 3
Max. Acid No. (Solids Basis): 8.3
W.P.G.: 8.55
Type Oil: Coconut
A non-drying alkyd recommended for high quality baking finishes and as a lacquer plasticizing resin or in non-yellowing acid catalyzed alkyd/urea conversion varnishes.

52 5206:
% N.V. by Wt.: 60
Solvent: VM&P/Isobutyl Alcohol
Viscosity: Z3-Z5
Reduced Viscosity: A1-B @ 40% N.V. in Xylene
Max. Color: 3
Max. Acid No. (Solids Basis): 8.3
W.P.G.: 8.10
Type Oil: Coconut
Exempt solvent version of 52-5205.

52 7566:
%. N.V. by Wt.: 60
Solvent: Toluene
Viscosity: X-Z
Reduced Viscosity: R-S @ 50%
Max. Color: 3
Max. Acid No. (Solids Basis): 8
W.P.G.: 8.55
Type Oil: Coconut
Non-drying alkyd designed for improved adhesion. Used extensively for wood lacquer finishes, it also can be used in alkyd-amino thermoset coatings.
Koppers 99-4

CARGILL, INC.: Short Oil Alkyds(Continued):

Non-Oxidizing--For Baking Applications or Plasticizers for Nitrocellulose(Continued):

52 7589:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: Z2-Z4
Max. Color: 3
Max. Acid No. (Solids Basis): 7
W.P.G.: 8.6
Type Oil: Non-oxidizing Fatty Acid
Non-drying alkyd designed for improved adhesion. Can be crosslinked with amino resins used for wood lacquer finishes.
Koppers 99-5

52 7594:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: Z2-Z3
Max. Color: 3
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.6
Type Oil: Non-oxidizing Fatty Acid
Non-drying alkyd designed for maximum chalk retention and chemical resistance. Used extensively in both lacquer and alkyd-amino thermoset coatings.
Koppers 94-5-60

Oxidizing--Baking or Air Dry Applications:

52 5228:
% N.V. by Wt.: 50
Solvent: VM&P/Isobutyl Alcohol
Viscosity: Z-Z3
Reduced Viscosity: B-E @ 40% N.V. in Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.70
Type Oil: Soya
Soybean Oil version of 52 5234.

CARGILL, INC.: Short Oil Alkyds(Continued):

Oxidizing--Baking or Air Dry Applications(Continued):

52 5230:
% N.V. by Wt.: 50
Solvent: Xylene/VM&P
Viscosity: Z3-Z5
Reduced Viscosity: K-O @ 40% N.V. in Xylene
Max. Color: 5
Max. Acid No. (Solids Basis): 12.2
W.P.G.: 8.20
Type Oil: TOFA
A short TOFA alkyd recommended for use in general purpose industrial baking finishes.

52 5235:
% N.V. by Wt.: 50
Solvent: Xylene/VM&P
Viscosity: Z3-Z5
Reduced Viscosity: K-O @ 40% N.V. in Xylene
Max. Color: 5
Max. Acid No. (Solids Basis): 12.2
W.P.G.: 8.20
Type Oil: Soya
Soybean version of 52 5230.

52 5234:
% N.V. by Wt.: 50
Solvent: VM&P/Isobutyl Alcohol
Viscosity: Z-Z3
Reduced Viscosity: B-E @ 40% N.V. in Xylene
Max. Color: 5
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.70
Type Oil: TOFA
A general purpose alkyd recommended for use with urea and melamine resins for bake coatings.

52 5236:
% N.V. by Wt.: 55
Solvent: Xylene
Viscosity: Z7 Max
Reduced Viscosity: F-I @ 40% N.V. in Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 11
W.P.G.: 8.40
Type Oil: TOFA
Recommended for use in general purpose industrial baking finishes. Can be used in Energy Saver Formulas.

CARGILL, INC.: Short Oil Alkyds(Continued):

Oxidizing--Baking or Air Dry Applications(Continued):

52 5251:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: Z2-Z4
Reduced Viscosity: C-F @ 35% N.V. in Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 8.24
Type Oil: TOFA
Possesses very fast bake speed and excellent hardness. Has a slow viscosity reduction curve and excellent overbake properties.

52 5265:
% N.V. by Wt.: 50
Solvent: VM&P/Isobutyl Alcohol
Viscosity: Z1-Z4
Reduced Viscosity: E-G @ 40% N.V. in Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.70
Type Oil: TOFA
A good general purpose short oil alkyd recommended for use with urea and melamine resins for bake coatings.

52 5284:
% N.V. by Wt.: 55
Solvent: VM&P/Isobutyl Alcohol
Viscosity: Z7 Max.
Reduced Viscosity: >-G @ 40% N.V. in Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 11
W.P.G.: 7.85
Type Oil: TOFA
Exempt solvent version of 52 5236.

52 7554:
% N.V. by Wt.: 55
Solvent: 150 Solvent/n-Butanol
Viscosity: X-Z
Max. Color: 6
Max. Acid No. (Solids Basis): 11
W.P.G.: 8.40
Type Oil: TOFA
A short alkyd designed for roller-coating applications.

CARGILL, INC.: Short Oil Alkyds(Continued):

Oxidizing--Baking or Air Dry Applications(Continued):

52 7570:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: Z2-Z5
Reduced Viscosity: U-X @ 50%
Max. Color: 8
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.50
Type Oil: Soya
General purpose air dry and baking resin. Exhibits a short to medium oil length dry.

52 7585:
% N.V. by Wt.: 40
Solvent: Xylene
Viscosity: Y-Z1
Max. Color: 8
Max. Acid No. (Solids Basis): 60
W.P.G.: 8.10
Type Oil: Linseed
High phthalic content alkyd designed with a high acid number for use as a resinous catalyst.

52 7595:
% N.V. by Wt.: 50
Solvent: SC-150/n-Butanol
Viscosity: Z1-Z3
Reduced Viscosity: J-M @ 40% N.V. Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 9
W.P.G.: 8.35
Type Oil: TOFA/Castor Oil
High phthalic content alkyd designed for rollercoater applications.

Oxidizing/Chain Stopped--For Rapid Air Dry or Force Cure Applications:

52 5254:
% N.V. by Wt.: 50
Solvent: VM&P/Isobutyl Alcohol
Viscosity: Y-Z2
Reduced Viscosity: U-Y @ 45% N.V. in VM&P
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.75
Type Oil: TOFA
A short, TOFA alkyd designed for fast air dry or baking finishes. Forms a flexible but durable coating.

CARGILL, INC.: Short Oil Alkyds(Continued):

Oxidizing/Chain Stopped--For Rapid Air Dry or Force Cure Applications(Continued):

52 5257:
% N.V. by Wt.: 50
Solvent: VM&P/Isobutyl Alcohol
Viscosity: Y-Z2
Reduced Viscosity: U-V @ 45% N.V. in VM&P
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.75
Type Oil: Soya
Soybean Oil version of 52 5254.

52 5270:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: W-Z
Reduced Viscosity: F-H @ 40% N.V. in xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.22
Type Oil: TOFA
Imparts extremely fast tack free time, with good corrosion, humidity and early water resistance.

52 5286:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: T-W
Reduced Viscosity: C-F @ 40% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 8.25
Type Oil: TOFA
Xylene version of 52 5254

52 5290:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: X-Z2
Reduced Viscosity: E-H @ 40% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 8.30
Type Oil: TOFA
A chain stopped alkyd giving very fast air dry with good gloss.

CARGILL, INC.: Short Oil Alkyds(Continued):

Oxidizing/Chain Stopped--For Rapid Air Dry or Force Cure Applications(Continued):

52 5291:
% N.V. by Wt.: 50
Solvent: VM&P/Isobutanol
Viscosity: Z3-Z6
Reduced Viscosity: E-G @ 40% N.V. in Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.60
Type Oil: TOFA
Exempt solvent version of 52 5290.

52 7597:
% N.V. by Wt.: 50
Solvent: Isobutanol/VM&P/Toluene/Xylene
Viscosity: Z1-Z3
Max. Color: 10
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.8
Type Oil: TOFA
Chain-stopped alkyd which imparts good through dry with good gloss retention.

52 7706:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: X-Z
Reduced Viscosity: G-H @ 40% N.V. in Xylene
Max. Color: 8
Max. Acid No. (Solids Basis): 16
W.P.G.: 8.2
Type Oil: Soya
Short oil isophthalic alkyd which exhibits extremely fast dry properties. Good gloss retention.

52 7707:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: X-Z
Reduced Viscosity: F-H @ 40% N.V. in Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.35
Type Oil: TOFA
A short TOFA alkyd which exhibits fast air dry properties. Improved flexibility and good compatibility with aliphatic solvents.

CARGILL, INC.: Short Oil Alkyds(Continued):

Oxidizing/Chain Stopped--For Rapid Air Dry or Force Cure Applications(Continued):

52 7716:
% N.V. by Wt.: 50
Solvent: VM&P/Toluene/Isobutanol
Viscosity: Z5-Z7
Max. Color: 6
Max. Acid No. (Solids Basis): 12
W.P.G.: 7.79
Type Oil: TOFA
52 5251 exempt version.

52 7733:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: Z3-Z5
Reduced Viscosity: N-P @ 40% N.V. in Xylene
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.40
Type Oil: TOFA
Imparts good fast through dry and good gloss retention.

Rosin and/or Phenolic Modified:

52 5262:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: W-Y
Reduced Viscosity: C-E @ 37% N.V. in Xylene
Max. Color: 10
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.25
Type Oil: Linseed
A phenolic modified short alkyd having excellent water and solvent resistance. Features a rapid air dry.

52 5203:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: X-Z
Max. Color: 12
Max. Acid No. (Solids Basis): 25-35
W.P.G.: 8.35
Type Oil: Linseed
A rosin and phenolic modified short alkyd, exhibits very fast dry properties, good adhesion and corrosion resistant coatings. Systems can be formulated to meet TT-P-664-C, MIL-P-22332B.

CARGILL, INC.: Short Oil Alkyds(Continued):

Rosin and/or Phenolic Modified(Continued):

52 5266:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: U-W
Reduced Viscosity: D-F @ 40% N.V. in Xylene
Max. Color: 14
Max. Acid No. (Solids Basis): 18
W.P.G.: 8.15
Type Oil: TOFA
Economical phenolic vehicle designed for primers.

52 5268:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: W-Y
Reduced Viscosity: E-H @ 40% N.V. Xylene
Max. Color: 10
Max. Acid No. (Solids Basis): 30
W.P.G.: 8.20
Type Oil: TOFA
Economical version of 52 5203 type resin.

52 5269:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: W-Y
Reduced Viscosity: B-F @ 40% N.V. Xylene
Max. Color: 10
Max. Acid No. (Solids Basis): 20
W.P.G.: 8.25
Type Oil: Soya
Primers can be formulated to meet TTE-485d, Type IV.

52 7701:
% N.V. by Wt.: 50
Solvent: PM Acetate/n-Butanol/VM&P
Viscosity: U-Y
Max. Color: 12
Max. Acid No. (Solids Basis): 25-35
W.P.G.: 8.0
Type Oil: Linseed
Exempt solvent version of 52 5203. Systems can be formulated to meet TT-P-664-C, Mil-P-22332B, Mil-E-52929, Mil-P-52995.

CARGILL, INC.: Alkyd Copolymers:

Styrenated Copolymers:

53 5364:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: Z1-Z3
Reduced Viscosity: C-G @ 37% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 6
W.P.G.: 8.20
Type Oil: Oxidizing Oil
Highly styrenated alkyd for very fast dry. Suitable for air dry, force dry and baking finishes.

53 5365:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: Z4-Z5
Max. Color: 6
Max. Acid No. (Solids Basis): 6
W.P.G.: 8.20
Type Oil: Oxidizing Oil
Specifically designed for hammer finishes. No additives needed for hammer effect. Air dry, force dry or baking finishes.

53 5367:
% N.V. by Wt.: 50
Solvent: Xylene/MS
Viscosity: Z1-Z3
Max. Color: 7
Max. Acid No. (Solids Basis): 8
W.P.G.: 7.70
Type Oil: Oxidizing Oil
Flexible styrenated alkyd.

53 5390:
% N.V. by Wt.: 60
Solvent: Xylene
Viscosity: Z-Z2
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 8.00
Type Oil: Mixed Oxidizing Oils
A styrenated alkyd suitable for fast drying industrial and hammer finishes.

CARGILL, INC.: Alkyd Copolymers(Continued):

Vinyl Toluenated Copolymers:

53 5303:
% N.V. by Wt.: 50
Solvent: VM&P
Viscosity: Y-Z1
Reduced Viscosity: N-Q @ 40% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 8
W.P.G.: 7.45
Type Oil: Mixed Oxidizing Oils
A vinyl toluenated alkyd with extremely fast air dry.

53 5307:
% N.V. by Wt.: 50
Solvent: VM&P/M.S.
Viscosity: Z1-Z3
Reduced Viscosity: T-V @ 40% N.V. in MS
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.45
Type Oil: Mixed Oxidizing Oils
A rapid drying VT alkyd copolymer with excellent leveling properties.

53 5322:
% N.V. by Wt.: 50
Solvent: VM&P
Viscosity: Z3-Z5
Reduced Viscosity: F-H @ 30% N.V.
Max. Color: 7
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.45
Type Oil: Mixed Oxidizing Oils
A high drink VT alkyd copolymer which features rapid dry and excellent durability.

53 5348:
% N.V. by Wt.: 60
Solvent: VM&P
Viscosity: Z-Z2
Max. Color: 5
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.65
Type Oil: Oxidizing
Economical copolymer offering fast dry and film hardness development. Suitable for aerosol applications.

CARGILL, INC.: Alkyd Copolymers(Continued):

Vinyl Toluenated Copolymers(Continued):

53 5356:
% N.V. by Wt.: 60
Solvent: VM&P
Viscosity: Z1-Z3
Reduced Viscosity: D-F @ 40% N.V.
Max. Color: 5
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.40
Type Oil: Linseed
A fast drying VT copolymer with good aerosol compatibility.

53 5370:
% N.V. by Wt.: 60
Solvent: VM&P
Viscosity: Z1-Z4
Reduced Viscosity: D-G @ 40% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 13
W.P.G.: 7.65
Type Oil: Mixed Oxidizing Oils
Forms a flexible coating with a fast dry. Used in aerosols, industrial enamels, wood coatings, and zinc stearate sanding sealers. Available at 50% solids as 53 5371.

Styrene/Vinyl Toluene Alkyd Copolymers:

53 5323:
% N.V. by Wt.: 60
Solvent: VM&P
Viscosity: Z1-Z4
Reduced Viscosity: F-H @ 40% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 9
W.P.G.: 7.70
Type Oil: Soya
A styrenated VT alkyd copolymer with good flexibility and adhesion along with rapid air dry.
(Available at 50% nvm as 53 5324.)

CARGILL, INC.: Alkyd Copolymers(Continued):

Acrylic Alkyd Copolymers:

53 5345:
% N.V. by Wt.: 60
Solvent: VM&P
Viscosity: Z-Z2
Reduced Viscosity: B-D @ 40% N.V.
Max. Color: 6
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.65
Type Oil: Soya
A VT/acrylic alkyd copolymer which dries extremely fast for a wide range of industrial coatings and finishes.

53 5359:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: S-V
Reduced Viscosity: C-F @ 40%
Max. Color: 8
Max. Acid No. (Solids Basis): 10
W.P.G.: 7.95
Type Oil: DCO
Acrylic modified alkyd copolymer resin designed to give outstanding exterior durability and fast dry with excellent adhesion to all metal surfaces.

53 5373:
% N.V. by Wt.: 50
Solvent: Xylene
Viscosity: X-Z
Max. Color: 12
Max. Acid No. (Solids Basis): 8
W.P.G.: 8.00
Type Oil: LSO
A coreaction product of an alkyd, styrene and acrylonitrile. Designed for early chemical resistance to lube oils, aliphatic solvents and gasoline.

53 5374:
% N.V. by Wt.: 50
Solvent: 20% Xylene/80% Ethyl Benzene
Viscosity: X-Z
Max. Color: 12
Max. Acid No. (Solids Basis): 8
W.P.G.: 8.00
Type Oil: LSO
A coreaction product of an alkyd, Styrene and acrylonitrile. Designed for early chemical resistance to lube oils, aliphatic solvents and gasoline.

DOCK RESINS CORP.: Alkyd Resins:

DORESCO AKD51-3:

DORESCO AKD51-3 is a short oil rosin modified alkyd that is designed to provide a cured film that will accept leaf for decorative printing effects. It is normally blended with amine resins; just before coating over printed stock the finish is catalyzed with DORESCO G-17, a para toluene sulfonic acid solution @ 50% solids. After curing, bronze, aluminum or other leaf is hot stamped to complete the job.

Physical Constants:
- Solids: 50+-1%
- Solvents: Xylol, Toluol
- Viscosity (Gardner): T-X
- Acid No.: 40-45
- Color: 10 max.
- Lbs./Gal.: 8.4
- PA Content: 38%
- Rosin: Present

DORESCO AKD55-5:

DORESCO AKD55-5 is a pure tall oil fatty acid alkyd that is short in oil length. It is a high quality alkyd used to formulate thermosetting clear overprint varnishes. These finishes are very responsive to DORESCO G-17, a 50% solution of para toluene sulfonic acid. Properly cured finishes retain color, resist blocking, marring, and abrasion.

In general, DORESCO AKD55-5 can be formulated into baking enamels that provide excellent gloss, gloss retention, film properties, high hiding and durability.

Physical Constants:
- Solids: 60+-1%
- Solvents: Xylol, Toluol
- Acid No.: 5 approx.
- Color: 4 max.
- Lbs./Gal.: 8.4
- PA Content: 40%

DOCK RESINS CORP.: Alkyd Resins(Continued):

DORESCO L20-13:

DORESCO L20-13 is an alkyd resin solution designed for lacquers. It should not be used by itself with nitrocellulose, but with maleic resin and plasticizers. It is recommended as a grinding vehicle. Raw umber and other difficult to disperse pigments grind readily in DORESCO L20-13, providing excellent paste stability and gloss. When used as a grinding vehicle in nitrocellulose lacquers, it is important to thin with some lacquer solvent rather than straight xylol or toluol.

DORESCO L20-13 has relatively low viscosity at high solids. It is ideal for hot spray lacquers or other systems where high solids are required. Even though it is a semi-drying alkyd, top coatings will not lift previous coatings. Color retention is good. It is not recommended for clear, water white lacquers as it has a color of approximately Gardner 5; however, it is satisfactory for pigmented whites and pastel colors.

Physical Constants:
- Solids: 75%
- Solvents: Xylol and Isopropanol
- Viscosity: X-Z
- Color: 6 max.
- Acid No.: 6.0 max.
- Lbs./Gal.: 9.0

DORESCO L20-35:

DORESCO L20-35 is a medium oil length alkyd that has somewhat better color retentive properties than soya alkyds but has poorer drying properties.

It is recommended for quick curing bake systems where color retention is important but the high cost and bake cycle required of a coconut alkyd is not warranted.

It can be used in nitrocellulose lacquers without lifting the undercoat. It is in Rule 66 solvents and can be used in flexo ink systems. In catalyzed systems with amine resins, stability and response are excellent.

Physical Constants:
- Solids: 70+-2%
- Solvents: VM&P Naphtha, Isopropanol
- Viscosity: Z-Z2
- Acid No.: 8 Max.
- Color: 4-6
- Lbs./Gal.: 8.35+-0.1

DOCK RESINS CORP.: Alkyd Resins(Continued):

DORESCO L226-1:
DORESCO L226-1 is a medium short alkyd designed to provide relatively high solids baking systems. It is a good grinding vehicle and is excellent for stability in alkyd-amine baking enamels.
In catalyzed alkyd-amine systems, DORESCO L226-1 is excellent for response and stability.

Physical Constants:
Solids: 60+-1%
Solvents: Xylol-Toluol
Viscosity: Z3-Z5
Acid No.: 7-11
Color: 5-7
Lbs./Gal.: 8.48+-0.1

DORESCO M99-14:
DORESCO M99-14 is a non-drying alkyd resin solution recommended for use with lacquer, and with butylated urea and melamine resins for enamels.
Enamels formulated with DORESCO M99-14 and amine resins have excellent color retention, gloss, durability, humidity and alkali resistance, even on overbake schedules.
In lacquers, DORESCO M99-14 provides excellent exterior durability, gloss, fullness, and elasticity. However, it is not recommended as the sole plasticizer and lacquer gum should be included in lacquer formulations.

Physical Constants:
Solids: 60%
Solvents: Xylol
Viscosity: Z2-Z4
Acid No.: 3-8
Color: 1-4
Oil: Coconut
Oil Content: Short
Lbs./Gal.: 8.0+-0.1

DOCK RESINS CORP.: Alkyd Resins(Continued):

DORESCO AKO4-1:

DORESCO AKO4-1 is a saturated polyester resin solution supplied at 60% solids in toluene. It is a highly specialized product made of FDA approved, carefully polymerized raw materials. As a result, upon decomposition, negligible odor of fumes evolve.

DORESCO AKO4-1 is a base for coatings for remote facsimile transmission paper. The molecular weight is high enough to carry black pigment and provide color intensity but low enough to prevent subsequent paper curl.

DORESCO AKO4-1 by itself is not a complete vehicle. Plasticizers and conducting additives are used along with conductive carbon black.

Physical Constants:

Solids: 60+-1%
Viscosity (Gardner): T-X
Acid No.: 12 Max.
Ring & Ball Melting Point (solids): 225-250F
Lbs./Gal.: 7.4+-0.1

FREEMAN POLYMERS DIVISION: Conventional Resins: Long Oil Alkyds:

11-2426:
Long Oil Alkyd
% NVM by Wt.: 70.0
Solvent: MS
Viscosity: Z1-Z2
Reduced Viscosity: Vis: D-F
NV: 50
Reducer: MS
Gardner Color Max.: 8
A.N. Max. (Solids Basis): 8.6
Lbs./Gal.: 7.9
Oil Type: Soya
Equiv. Weight(Solids): 1170
Good gloss and color retention, ease of brushing, meets TT-R-266, Type I, Class A

Medium Oil Alkyds:

11-0015:
Medium Oil Alkyd
% NVM by Wt.: 50.0
Solvent: MS
Viscosity: Z1-Z3
Reduced Viscosity: Vis: H-I
NV: 40
Reducer: MS
Gardner Color Max.: 8
A.N. Max. (Solids Basis): 9.0
Lbs./Gal.: 7.63
Oil Type: Soya
Higher drink, good dry, early hardness development

11-3407:
Medium Oil Alkyd
% NVM by Wt.: 50.5
Solvent: MS
Viscosity: Z-Z2
Reduced Viscosity: Vis: K-M
NV: 40
Reducer: MS
Gardner Color Max.: 8
A.N. Max. (Solids Basis): 12
Lbs/Gal.: 7.6
Oil Type: Soya
Equiv. Weight (Solids): 905
Isophthalic alkyd, rapid set and through dry, outstanding salt spray resistance, can be cured with urea or melamine resin, excellent flexibility and adhesion

FREEMAN POLYMERS DIVISION: Conventional Resins: Medium Oil Alkyds(Continued):

11-3548:
Medium Oil Alkyd
% NVM by Wt.: 50.0
Solvent: MS/Xylene: 97/3
Viscosity: Z5-Z6
Reduced Viscosity: Vis: D-F
NV: 33
Reducer: MS
Gardner Color Max.: 8
A.N. Max. (Solids Basis): 14
Lbs./Gal.: 7.6
Oil Type: Soya
Equiv. Weight (Solids): 770
Fast air dry or force cure, good durability and corrosion resistance

11-2711:
Chain Stopped Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene/Toluene/MS/EEP/EGMBEA*: 2/4/87/5/2
Viscosity: Z2-Z5
Reduced Viscosity: Vis: S-V
NV: 35
Reducer: MS
Gardner Color Max.: 8
A.N. Max. (Solids Basis): 12.0
Lbs./Gal.: 7.75
Oil Type: Soya
Equiv. Weight (Solids): 1020
Excellent weatherability, outstanding compatibility and aliphatic solvent tolerance

Short Oil Alkyds-Air Dry:

11-0075:
Short Oil Alkyd
% NVM by Wt.: 50
Solvent: Xylene
Viscosity: Z1-Z3
Reduced Viscosity: Vis: M-O
NV: 40
Reducer: Xylene
Gardner Color Max.: 4
A.N. Max. (Solids Basis): 12.0
Lbs./Gal.: 8.37
Oil Type: TOFA
Fast air dry or bake, may also be used as a lacquer plasticizer

* Ethylene Glycol Monobutyl Ether Acetate

FREEMAN POLYMERS DIVISION: Conventional Resins: Short Oil Alkyds--Air Dry(Continued):

11-0157:
Short Oil Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: Y-Z1
Reduced Viscosity: Vis: H
NV: 40
Reducer: Xylene
Gardner Color Max.: 8
A.N. Max. (Solids Basis): 15.0
Lbs./Gal.: 8.30
Oil Type: Soya
Medium-short oil type, Soya version of 11-0571 with better wetting and durability

11-0571:
Resin Type: Short Oil Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: Y-Z
Reduced Viscosity: Vis: F-H
NV: 40
Reducer: Xylene
Gardner Color Max.: 6
A.N. Max. (Solids Basis): 15.0
Lbs./Gal.: 8.30
Oil Type: TOFA
Medium-short oil type, excellent compatibility with medium oil alkyds

Short Oil Alkyds--Bake:

11-3920:
Resin Type: Short Oil Alkyd
% NVM by Wt.: 80.0
Solvent: Xylene
Viscosity: Z4-Z5
Reduced Viscosity: Vis: G
NV: 60
Reducer: Xylene
Gardner Color Max.: 5
A.N. Max. (Solids Basis): 10.0
Lbs./Gal.: 8.87
Oil Type: Coconut
Plasticizer for vinyls, nitrocellulose, chlorinated rubber, also for high solids baking systems

FREEMAN POLYMERS DIVISION: Conventional Resins: Short Oil Alkyds--Bake(Continued):

11-4218:
Short Oil Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: Z2-Z5
Reduced Viscosity: Vis: K-N
NV: 40
Reducer: Xylene
Gardner Color Max.: 7
A.N. Max. (Solids Basis): 10.0
Lbs./Gal.: 8.3
Oil Type: TOFA
Equiv. Weight (Solids): 468
Highly compatible with melamine and urea resins, good hardness, mar resistance, gloss and gloss retention

11-8332:
Short Oil Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: Z-Z1
Reduced Viscosity: Vis: G-H
NV: 40
Reducer: Xylene
Gardner Color Max.: 6
A.N. Max. (Solids Basis): 10.0
Lbs./Gal.: 8.3
Oil Type: TOFA
Economical general industrial baking finishes

11-4300:
Short Oil Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: Z-Z2
Reduced Viscosity: Vis: U-W
NV: 45
Reducer: Xylene
Gardner Color Max.: 7
A.N. Max. (Solids Basis): 14
Lbs./Gal.: 8.2
Oil Type: DCO
Equiv. Weight (Solids): 456
Exceptional hardness, flexibility and adhesion, salt spray and humidity resistance, good adhesion to non-ferrous metals

FREEMAN POLYMERS DIVISION: Conventional Resins: Chain Stopped:

11-2932:
Chain Stopped Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: V-Y
Reduced Viscosity: Vis: E-H
NV: 40
Reducer: Xylene
Gardner Color Max.: 9
A.N. Max. (Solids Basis): 14
Lbs./Gal.: 8.3
Oil Type: Soya
Equiv. Weight (Solids): 524
Fast dry, durable, compatible with medium oil alkyds, can be crosslinked with melamine or urea resins, soluble in aliphatic solvents

11-3068:
Chain Stopped Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: T-W
Reduced Viscosity: Vis: B-D
NV: 40
Reducer: Xylene
Gardner Color Max.: 8
A.N. Max (Solids Basis): 12
Lbs./Gal.: 8.3
Oil Type: Soya
Equiv. Weight (Solids): 524
Rapid air dry or low temperature force cure application high gloss and excellent gloss retention, good salt spray resistance

11-3830:
Chain Stopped Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: X-Z
Reduced Viscosity: Vis: F-I
NV: 40
Reducer: Xylene
Gardner Color Max.: 7
A.N. Max. (Solids Basis): 10
Lbs./Gal.: 8.3
Oil Type: TOFA
Equiv. Weight (Solids): 623
Highly compatible with medium oil alkyds, fast drying, good adhesion and flexibility, good solubility in aliphatic solvents

FREEMAN POLYMERS DIVISION: Conventional Resins: Chain Stopped (Continued):

11-4423:
Chain Stopped Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: X-Z
Reduced Viscosity: Vis: G-I
NV: 40
Reducer: Xylene
Gardner Color Max.: 7
A.N. Max. (Solids Basis): 8
Lbs./Gal.: 8.3
Oil Type: TOFA
Equiv. Weight (Solids): 890
Fast dry, excellent gloss retention, good flexibility and salt spray resistance

11-4119:
Chain Stopped Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: X-Z
Reduced Viscosity: Vis: G-H
NV: 40
Reducer: Xylene
Gardner Color Max.: 18
A.N. Max (Solids Basis): 16
Lbs./Gal.: 8.2
Oil Type: Soya
Equiv. Weight (Solids): 676
Excellent gloss and gloss retention, air dry or crosslinked with melamine or urea resins

Modified Alkyds:

12-0009:
Modified Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: W-Y
Reduced Viscosity: Vis: E-G
NV: 40
Reducer: Xylene
Gardner Color Max.: 10
A.N. Max. (Solids Basis): 27.0
Lbs./Gal.: 8.3
Oil Type: Linseed
Mod.: Phenolic
Meets TT-P664C, lift resistant primer

FREEMAN POLYMERS DIVISION: Conventional Resins: Modified Alkyds (Continued):

12-4102:
Modified Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene/VM&P Naphtha: 66/34
Viscosity: Z-Z2
Reduced Viscosity: Vis: F-H
NV: 40
Reducer: Xylene
Gardner Color Max.: 12
A.N. Max. (Solids Basis): 16
Lbs./Gal.: 8.0
Oil Type: Linseed
Mod.: Rosin
Equiv. Weight (Solids): 710
Fast set and dry times, may be recoated in 5-10 minutes, excellent salt spray resistance

12-2101:
Modified Alkyd
% NVM by Wt.: 60.0
Solvent: MS
Viscosity: V-X
Reduced Viscosity: Vis: F-I
NV: 50
Reducer: MS
Gardner Color Max.: 8
A.N. Max. (Solids Basis): 8.3
Lbs./Gal.: 7.85
Oil Type: Soya
Mod.: Silicone
Equiv. Weight (Solids): 4675
Superior gloss and color retention, excellent exterior durability, good hardness development

Monomer Modified:

13-0617:
Monomer Modified Alkyd
% NVM by Wt.: 60.0
Solvent: Xylene
Viscosity: Z3-Z5
Reduced Viscosity: Vis: T-U
NV: 50
Reducer: Xylene
Gardner Color Max.: 5
A.N. Max. (Solids Basis): 10
Lbs./Gal.: 8.3
Oil Type: TOFA
Mod.: Acrylic
Low cost acrylated alkyd for use in baking or air dry enamels, good exterior durability

FREEMAN POLYMERS DIVISION: Conventional Resins: Monomer Modified(Continued):

13-1214:
Monomer Modified Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: T-V
Reduced Viscosity: Vis: D-F
NV: 40
Reducer: Xylene
Gardner Color Max.: 6
A.N. Max. (Solids Basis): 12
Lbs./Gal.: 8.0
Oil Type: DCO
Mod.: Acrylic
Equiv. Weight (Solids): 1650
Rapid air dry or force cure, excellent adhesion, flexibility and color retention, excellent exterior durability, compatibility with vinyl, acrylic, nitrocellulose and chlorinated rubber

13-1501:
Monomer Modified Alkyd
% NVM by Wt.: 50.0
Solvent: Xylene
Viscosity: R-U
Reduced Viscosity: Vis: C-E
NV: 40
Reducer: Xylene
Gardner Color Max.: 6
A.N. Max. (Solids Basis): 14
Lbs./Gal.: 8.2
Oil Type: Oxidizing
Mod.: Acrylic
Equiv. Weight (Solids): 2338
Good exterior durability and adhesion to metal substrates, excellent compatibility, fast air dry

13-1905:
Monomer Modified Alkyd
% NVM by Wt.: 50.0
Solvent: VM&P
Viscosity: W-Z
Reduced Viscosity: Vis: C-E
NV: 35
Reducer: VM&P
Gardner Color Max.: 6
A.N. Max. (Solids Basis): 12
Lbs./Gal.: 7.35
Oil Type: Soya
Mod.: VT
Equiv. Weight (Solids): 1650
High gloss, very fast dry, able to take high pigment loadings

FREEMAN POLYMERS DIVISION: High Solids: Monomer Modified (Continued):

13-2228:
Monomer Modified Alkyd
% NVM by Wt.: 60.0
Solvent: Xylene
Viscosity: Z1-Z3
Reduced Viscosity: Vis: F-H
NV: 40
Reducer: Xylene
Gardner Color Max.: 6
A.N. Max (Solids Basis): 11.7
Lbs./Gal.: 8.3
Oil Type: Soya
Mod.: Styrene
Equiv. Weight (Solids): 1194
Fast air dry or force cure, can be used for hammer tone finishes

14-0141:
Monomer Modified Alkyd
% NVM by Wt.: 60.0
Solvent: VM&P
Viscosity: Y-Z1
Reduced Viscosity: Vis: D-F
NV: 40
Reducer: VM&P
Gardner Color Max.: 5
A.N. Max. (Solids Basis): 11.7
Lbs./Gal.: 7.6
Oil Type: Oxidizing
Mod.: VT
Equiv. Weight (Solids): 2078
Very fast air dry, good hardness and gloss, good compatibility with lower solvency aliphatics

Oleoresinous Varnish:

15-2518:
Oleoresinous Varnish
% NVM by Wt.: 70.0
Solvent: VM&P/MS: 50/50
Viscosity: W-Y
Reduced Viscosity: Vis: T-V
NV: 65
Reducer: MS
Gardner Color Max.: 12
A.N. Max. (Solids Basis): 14.3
Lbs./Gal.: 7.7
Oil Type: Tung
Exceptional hardness, good mar and abrasion resistance ease of obtaining high film build--for wrinkle finishes

FREEMAN POLYMERS DIVISION: Conventional Resins: Urethane Modified Alkyd:

18-0094:
Urethane Alkyd
% NVM by Wt.: 51.0
Solvent: MS
Viscosity: X-Z
Reduced Viscosity: Vis: A+-B+
NV: 40
Reducer: MS
Gardner Color Max.: 6
A.N. Max. (Solids Basis): 3.9
Lbs./Gal.: 7.55
Oil Type: Soya
Equiv. Weight (Solids): 3506
Excellent mar resistance, hard light colored coatings

18-0103:
Urethane Alkyd
% NVM by Wt.: 55.0
Solvent: MS
Viscosity: Z4-Z6
Reduced Viscosity: Vis: H-J
NV: 45
Reducer: MS
Gardner Color Max.: 8
Lbs./Gal.: 7.7
Oil Type: Soya
Equiv. Weight (Solids): 1275
Moisture resistant, good abrasion resistance, durable and economical

18-0551:
Urethane Alkyd
% NVM by Wt.: 55.0
Solvent: MS
Viscosity: S-V
Reduced Viscosity: Vis: A-B
NV: 40
Reducer: MS
Gardner Color Max.: 5
A.N. Max. (Solids Basis): 2.0
Lbs./Gal.: 7.63
Oil Type: Soya/Linseed
Excellent abrasion resistance and film toughness, good resistance to solvents and chemicals, excellent color and UV stability, fast dry

MCWHORTER: Alkyds:

Chain-Stopped:

DURAMAC 2034:
Wt/Gal: 8.20
% NVM: 50
Solvents: Xylol
Gardner Color: 8 Max
Acid # (Solids): 8 Max
Viscosity: Z3-Z5
Reduced Viscosity: N-Q @ 40% Xylol
F Seta Flash Point: 80
% Oil: 32
Oil Type: Special FA
A high quality, high-drink alkyd with outstanding exterior durability. It provides excellent gloss and gloss retention, and has good hot tack resiatance.

DURAMAC 2405:
Wt/Gal: 8.30
% NVM: 50
Solvents: Xylol
Gardner Color: 6 Max
Acid # (Solids): 12 max
Viscosity: U-W
Reduced Viscosity: C-E @ 40% Xylol
F Seta Flash Point: 80
% Oil: 35
Oil Type: Soya
An economical, fast-drying short oil alkyd which has outstanding exterior durability and salt spray resistance. An excellent truck and tractor enamel vehicle. It is quickly recoatable and has good touch-up qualities.

DURAMAC 2486:
Wt/Gal: 8.30
% NVM: 50
Solvents: Xylol
Gardner Color: 6 Max
Acid # (Solids): 12 Max
Viscosity: Y-Z1
Reduced Viscosity: G-H @ 40% Xylol
F Seta Flash Point: 80
% Oil: 32
Oil Type: TOFA
A rapid-drying, color-retentive short oil alkyd. It is suitable for implement enamels and air-dry or low bake industrial finishes. It combines high gloss and good salt spray resistance with good overbake.

MCWHORTER: Alkyds(Continued):

Chain-Stopped(Continued):

DURAMAC 2631:
Wt/Gal: 8.30
% NVM: 50
Solvents: Xylol
Gardner Color: 8 Max
Acid # (Solids): 5-10 Max
Viscosity: X-Z
Reduced Viscosity: F-H @ 40% Xylol
F Seta Flash Point: 80
% Oil: 32
Oil Type: Soya
Has unusual aliphatic tolerance. It is a very short alkyd which has quite a fast dry, a good hardness, and a good abrasion resistance. This vehicle has good compatibility with a wide range of film formers.

DURAMAC 2705:
Wt/Gal: 8.75
% NVM: 75
Solvents: MPK/Xylol
Gardner Color: 8 Max
Acid # (Solids): 8-14 Max
Viscosity: Y-Z1
Reduced Viscosity: E-G @ 60% Xylol
% Seta Flash Point: 46
% Oil: 33
Oil Type: TOFA
Provides 3.5 VOC air-dry finishes at low viscosities. This resin, when blended with DURAMAC 2707, will enable formulation of high build films with excellent sag resistance, good flow, and very good weatherability.

DURAMAC 2707:
Wt/Gal: 8.90
% NVM: 75
Solvents: MPK/Xylol
Gardner Color: 8 Max
Acid # (Solids): 10-15 Max
Viscosity: Z-Z2
Reduced Viscosity: G-H @ 60% Xylol
F Seta Flash Point: 46
% Oil: 26
Oil Type: TOFA
A vehicle designed to formulate VOC compliant primers and topcoats at low viscosities. It has good exterior durability and extremely fast air-dry characteristics.

MCWHORTER: Alkyds(Continued):

Chain-Stopped(Continued):

DURAMAC 2720:
Wt/Gal: 8.85
% NVM: 75
Solvents: Xylol/Sec. But.
Gardner Color: 18 Max
Acid # (Solids): 20-25 Max
Viscosity: Z-Z3
Reduced Viscosity: D-I @ 60% Xylol
F Seta Flash Point: 78
% Oil: 32
Oil Type: TOFA
An alkyd resin with excellent long-term durability and humidity resistance. It can be used to formulate 3.5 VOC coatings with low viscosities.

DURAMAC 2725:
Wt/Gal: 8.90
% NVM: 75
Solvents: MPK/Xylol
Gardner Color: 8 Max
Acid # (Solids): 10-15 Max
Viscosity: Z-Z2
F Seta Flash Point: 46
% Oil: 26
Oil Type: DCO/Soya
A high solids DCO/soya chain-stopped alkyd. It has extremely fast air-dry with excellent early water resistance. Recommended for transportation and implement enamels.

DURAMAC 2742:
Wt/Gal: 8.99
% NVM: 75
Solvents: Butyl Acet./Xylol
Gardner Color: 6 Max
Acid # (Solids): 15 Max
Viscosity: Z1-Z3
Reduced Viscosity: H-I @ 60% Xylol
F Seta Flash Point: 80
% Oil: 33
Oil Type: Sunflower
A high solids sunflower chain-stopped alkyd with good speed of dry, salt spray and gloss retention for economical formulation below 3.5 VOC.

MCWHORTER: Alkyds(Continued):

Chain-Stopped(Continued):

DURAMAC 2748:
Wt/Gal: 8.95
% NVM: 75
Solvents: Xylol/MPK
Gardner Color: 8 Max
Acid # (Solids): 10-15
Viscosity: Z-Z2
Reduced Viscosity: G-H @ 60% Xylol
F Seta Flash Point: 45
% Oil: 28
Oil Type: TOFA
A tall oil, fatty acid, high solids chain-stopped alkyd for fast air-dry and force-cure application.

DURAMAC 2755:
Wt/Gal: 8.70
% NVM: 75
Solvents: MPK/Xylol
Gardner Color: 8 Max
Acid # (Solids): 8-12
Viscosity: Y-Z1
F Seta Flash Point: 45
% Oil: 20
Oil Type: TOFA
A tall oil high solids chain-stopped alkyd for snap-dry with good durability and corrosion resistance. DURAMAC 2755 will formulate to 2.8 VOC with 1,1,1 trichloroethane.

DURAMAC 6605:
Wt/Gal: 7.77
% NVM: 50
Solvents: Exempt
Gardner Color: 6 Max
Acid # (Solids): 12 Max
Viscosity: Z2-Z4
F Seta Flash Point: 35
Oil Type: Soya
Air-dries very quickly and has outstanding exterior durability and salt spray resistance. It is in a Rule 66 exempt solvent blend. Both primers and topcoats have very good recoatability.

MCWHORTER: Alkyds(Continued):

Chain-Stopped(Continued):

DURAMAC 6694:
Wt/Gal: 7.85
% NVM: 50
Solvents: Exempt
Gardner Color: 6 Max
Acid # (Solids): 8 Max
Viscosity: Z1-Z3
Reduced Viscosity: D-F @ 40% Xylol
F Seta Flash Point: 55
% Oil: 30
Oil Type: Soya
A color-retentive short oil alkyd in Rule 66 exempt solvents. Films made with this resin exhibit very high gloss, good flexibility and adhesion at an economical price.

Short Oil:

DURAMAC 2026:
Wt/Gal: 9.00
% NVM: 85
Solvents: Xylol
Gardner Color: 7 Max
Acid # (Solids): 10-15
Viscosity: Z3-Z4.5
Reduced Viscosity: H-J @ 70% Xylol
F Seta Flash Point: 80
% Oil: 22
Oil Type: TOFA
A high solids baking alkyd which yields outstanding finishes at spray viscosity at VOC of 3.0. Properly formulated, it will develop H-2H hardness. It has superior resistance to telegraphing.

DURAMAC 2040:
Wt/Gal: 8.30
% NVM: 50
Solvents: Xylol
Gardner Color: 6 Max
Acid # (Solids): 12 Max
Viscosity: Z2-Z4
Reduced Viscosity: K-N @ 40% Xylol
F Seta Flash Point: 80
% Oil: 32
Oil Type: TOFA
An economical, general purpose baking alkyd. It has a wide scope of melamine and urea compatibility, and excellent cure response. It offers high gloss and very good color retention.

MCWHORTER: Alkyds(Continued):

Short Oil(Continued):

DURAMAC 2049:
Wt/Gal: 9.25
% NVM: 85
Solvents: Xylol
Gardner Color: 6 Max
Acid # (Solids): 10 Max
Viscosity: Z2-Z4
Reduced Viscosity: I-L @ 70% Xylol
F Seta Flash Point: 80
% Oil: 22
Oil Type: TOFA
An interior high solids baking alkyd with excellent gloss, flexibility and hardness at economical terms. An outstanding value.

DURAMAC 2050:
Wt/Gal: 9.25
% NVM: 85
Solvents: Xylol
Gardner Color: 6 Max
Acid # (Solids): 10 Max
Viscosity: Y-Z2
Reduced Viscosity: F-I @ 70% Xylol
F Seta Flash Point: 80
% Oil: 27
Oil Type: TOFA
A very low VOC high solids baking alkyd with better than average cure response.

DURAMAC 2053:
Wt/Gal: 9.25
% NVM: 84.5
Solvents: Arom. 100
Gardner Color: 6 Max
Acid # (Solids): 10 Max
Viscosity: Z3-Z5
Reduced Viscosity: L-O @ 70% Xylol
F Seta Flash Point: 116
% Oil: 26
Oil Type: TOFA
A vehicle with all the properties of DURAMAC 2050 but in higher boiling solvent for roll coat and dip tank applications.

MCWHORTER: Alkyds(Continued):

Short-Oil(Continued):

DURAMAC 2483:
Wt/Gal: 8.25
% NVM: 50
Solvents: Xylol
Gardner Color: 5 Max
Acid # (Solids): 8 Max
Viscosity: Z3-Z5
Reduced Viscosity: 1 min. @ 40% Xylol
F Seta Flash Point: 80
% Oil: 32
Oil Type: TOFA
A quality vehicle for use in high gloss, color-retentive enamels. Its compatibility and fast cure response make it a suitable vehicle for most industrial baking finishes.

DURAMAC 2698:
Wt/Gal: 8.70
% NVM: 60
Solvents: Xylol
Gardner Color: 3 Max
Acid # (Solids): 12 Max
Viscosity: Z2-Z4
Reduced Viscosity: B-E @ 40% Xylol
F Seta Flash Point: 80
% Oil: 32
Oil Type: Coconut
An exceptionally light-colored coconut oil alkyd which also has a very good clarity. It functions as a plasticizer for nitrocellulose lacquers, imparting flexibility over a wide temperature range.

DURAMAC 6674:
Wt/Gal: 7.84
% NVM: 50
Solvents: Exempt
Gardner Color: 6 Max
Acid # (Solids): 10 Max
Viscosity: Z1-Z3
F Seta Flash Point: 75
% Oil: 33
Oil Type: TOFA
An outstanding general purpose short oil in Rule 66 exempt solvents. It has excellent color retention, gloss and hardness and offers economies in formulating.

MCWHORTER: Alkyds(Continued):

Medium Oil:

DURAMAC 2020:
Wt/Gal: 7.20
% NVM: 35
Solvents: MS
Gardner Color: 8 Max
Acid # (Solids): 11 Max
Viscosity: Z1-Z3
F Seta Flash Point: 108
Oil Type: Soya
A high quality flat wall vehicle which, in addition to its compatibility with long oil alkyds, has unusual flexibility. It provides good enamel hold-out, and improves flow and leveling.

DURAMAC 2409:
Wt/Gal: 7.58
% NVM: 50
Solvents: MS
Gardner Color: 8 Max
Acid # (Solids): 11 Max
Viscosity: W-Z
Reduced Viscosity: E-G @ 40% MS
F Seta Flash Point: 105
% Oil: 53
Oil Type: Soya
A versatile alkyd for quality, non-yellowing, durable interior and exterior enamels. It offers corrosion resistance and polyurethane compatibility. Meets Federal Spec TT-R-266, Type IV.

DURAMAC 2426:
Wt/Gal: 7.55
% NVM: 50
Solvents: MS
Gardner Color: 10 Max
Acid # (Solids): 10 Max
Viscosity: W-Z
Reduced Viscosity: E-G @ 40% MS
F Seta Flash Point: 105
% Oil: 52
Oil Type: Linseed/Soya
An excellent vehicle with flow and leveling properties necessary for brushable coatings. Meets Federal Spec. TT-R-266, Type III.

MCWHORTER: Alkyds(Continued):

Medium Oil(Continued):

DURAMAC 2428:
Wt/Gal: 7.55
% NVM: 50
Solvents: MS
Gardner Color: 6-10
Acid # (Solids): 6-10
Viscosity: W-Z
Reduced Viscosity: E-G @ 40% MS
F Seta Flash Point: 105
% Oil: 53
Oil Type: Linseed/Soya
Imparts good flow and leveling, and ease of brushing. It provides fast, positive-drying films. Conforming to Federal Spec TT-R-266, Type III, it provides enamels meeting viscosity requirements at minimum solids.

DURAMAC 2434:
Wt/Gal: 8.40
% NVM: 65
Solvents: Xylol
Gardner Color: 6 Max
Acid # (Solids): 3-6
Viscosity: Y-Z
F Seta Flash Point: 80
% Oil: 47
Oil Type: Soya
A higher-solids alkyd which has compatibility with a wide variety of resins, including nitrocellulose lacquers. It enhances adhesion and flexibility and has excellent pigment wetting properties.

DURAMAC 2452:
Wt/Gal: 7.40
% NVM: 50
Solvents: VMP
Gardner Color: 8 Max
Acid # (Solids): 9 Max
Viscosity: Z1-Z3
F Seta Flash Point: 55
% Oil: 49
Oil Type: Soya
A fast-drying alkyd which offers high gloss and good abrasion resistance. It finds application as a traffic-marking paint vehicle and meets most state specifications.

MCHWORTER: Alkyds(Continued):

Medium Oil(Continued):

DURAMAC 2455:
Wt./Gal.: 7.60
% NVM: 50
Solvents: MS
Gardner Color: 8 Max
Acid # (Solids): 10 Max
Viscosity: Z3-Z5
Reduced Viscosity: Q-T @ 40% MS
F Seta Flash Point: 105
% Oil: 53
Oil Type: Soya
Has good aliphatic tolerance. Its high viscosity permits flexibilities in formulating. Films made with this resin are hard and flexible and have excellent through-dry, gloss, and gloss retention.

DURAMAC 2624:
Wt/Gal: 7.55
% NVM: 50
Solvents: MS
Gardner Color: 8 Max
Acid # (Solids): 10 Max
Viscosity: Z1-Z3
Reduced Viscosity: J-L @ 40% MS
F Seta Flash Point: 105
% Oil: 54
Oil Type: Soya
Offers the formulator high quality, quick-dry enamels. Its excellent weatherability suggests use as trim and trellis paints, and truck and implement touch-up enamels.

DURAMAC 2641:
Wt/Gal: 8.30
% NVM: 60
Solvents: Xylol
Gardner Color: 8 Max
Acid # (Solids): 30-36
Viscosity: Z-Z2
F Seta Flash Point: 81
% Oil: 45
Oil Type: Linseed
Has unusually good adhesion and resists lifting by lacquers. It is very quickly set-to-touch, and has good durability. It meets Federal Spec. MIL-P-8585A. With MAXVAR 2525, meets TT-P-1757.

MCWHORTER: Alkyds(Continued):

Medium Oil(Continued):

DURAMAC 2693:
Wt/Gal: 7.66
% NVM: 60
Solvents: VMP
Gardner Color: 9 Max
Acid # (Solids): 8 Max
Viscosity: Z3-Z5
Reduced Viscosity: F-G @ 45% VMP
F Seta Flash Point: 55
% Oil: 51
Oil Type: Soya
Has good gloss, good durability, and dries quickly. Its primary use is in traffic marking paints. It offers economy, along with color and gloss retention, water and gasoline resistance.

DURAMAC 2768:
Wt/Gal: 8.75
% NVM: 80
Solvents: Arom. 100/Butyl Acet.
Gardner Color: 8 Max
Acid # (Solids): 10 Max
Viscosity: Z1-Z3
Reduced Viscosity: B-C @ 60% Butyl Acet.
F Seta Flash Point: 99
Oil Type: Soya/Linseed
An extremely durable high solids medium oil alkyd with very positive through-dry for compliance applications. It meets Federal Spec. TTP-489H.

Long Oil:

DURAMAC 2002:
Wt/Gal: 8.00
% NVM: 70
Solvents: MS
Gardner Color: 7 Max
Acid # (Solids): 10 Max
Viscosity: Z3-Z5
Reduced Viscosity: E-G @ 50% MS
F Seta Flash Point: 105
% Oil: 60
Oil Type: TOFA
An outstanding tall oil vehicle. It features rapid set-to-touch, excellent gloss and durability and good through-dry. This vehicle has excellent color and clarity.

MCWHORTER: Alkyds(Continued):

Long Oil(Continued):

DURAMAC 2033:
Wt/Gal: 8.30
% NVM: 100
Gardner Color: 10 Max
Acid # (Solids): 10 Max
Viscosity: W-Y
% Oil: 77
Oil Type: Linseed
A high quality vehicle which has exceptional wetting and weathering properties. It functions as a modifier for latex paints and as an inexpensive stain carrier.

DURAMAC 2400:
Wt/Gal: 8.17
% NVM: 100
Gardner Color: 5-11
Acid # (Solids): 6 Max
Viscosity: X-Z
% Oil: 83
Oil Type: Soya
An isophthalic vehicle which finds application as a modifier for latex house paints and functions as an inexpensive stain carrier. It has excellent weathering characteristics and will provide high gloss. Meets Federal Spec. TT-P-102D.

DURAMAC 2435:
Wt/Gal: 8.01
% NVM: 70
Solvents: OMS
Gardner Color: 7 Max
Acid # (Solids): 9 Max
Viscosity: Z3-Z5
Reduced Viscosity: H-J @ 50% OMS
F Seta Flash Point: 105
% Oil: 66
Oil Type: Soya
In odorless mineral spirits, for use in areas where odors are a problem, such as hospitals, stores, restaurants, etc. It is a high quality vehicle and has good physical properties.

MCWHORTER: Alkyds(Continued):

Long Oil(Continued):

DURAMAC 2468:
Wt/Gal: 7.75
% NVM: 60
Solvents: LOMS
Gardner Color: 8 Max
Acid # (Solids): 9 Max
Viscosity: U-W
Reduced Viscosity: D-F @ 50% MS
F Seta Flash Point: 105
% Oil: 64
Oil Type: Soya
A light-colored, lower-viscosity resin which is a TTR-266, Type I, Class B type vehicle. It imparts good gloss, excellent brushability, and very good exterior durability to a film.

DURAMAC 2622:
Wt/Gal: 7.75
% NVM: 60
Solvents: MS
Gardner Color: 7 Max
Acid # (Solids): 10 Max
Viscosity: Z-Z2
Reduced Viscosity: J-L @ 50% MS
F Seta Flash Point: 105
% Oil: 60
Oil Type: Soya
Provides films with excellent brush, flow, and leveling. It also has very good gloss, gloss retention, and durability.

DURAMAC 2632:
Wt/Gal: 8.00
% NVM: 70
Solvents: MS
Gardner Color: 7 Max
Acid # (Solids): 10 Max
Viscosity: Z2-Z4
Reduced Viscosity: U-W @ 60% MS
% Seta Flash Point: 105
% Oil: 62
Oil Type: Soya
A top quality resin which has excellent gloss, hardness, and durability. It qualifies for Federal Spec. TT-R-266, Type I, Class A.

MCWHORTER: Alkyds(Continued):

DURAMAC 2662:
Wt/Gal: 7.70
% NVM: 60
Solvents: MS
Gardner Color: 10 Max
Acid # (Solids): 5-10
Viscosity: T-W
Reduced Viscosity: C-F @ 50% MS
F Seta Flash Point: 105
% Oil: 64
Oil Type: Soya
A Federal Spec TT-R-266, Type I, Class B vehicle that can be used to formulate a wide variety of maintenance and trade sales finishes for exterior use.

DURAMAC 2712:
Wt/Gal: 7.15
% NVM: 40
Solvents: MS
Gardner Color: 8 Max
Acid # (Solids): 12 Max
Viscosity: S-U
F Seta Flash Point: 105
% Oil: 61
Oil Type: Special Oil
A unusual alkyd. It offers high viscosity at lower solids and provides excellent self-sealing properties. It affords positive drying under adverse conditions.

DURAMAC 2757:
Wt/Gal: 8.35
% NVM: 96
Solvents: Xylol
Gardner Color: 12 Max
Acid # (Solids): 5-10
Viscosity: Z2-Z3
F Seta Flash Point: 101
Oil Type: Soya
A unique high solids long oil that is an excellent vehicle for 250 grams/liter enamels that have a very hard through-dry, excellent gloss retention and low brush drag.

MCWHORTER: Alkyds(Continued):

Long Oil(Continued):

DURAMAC 2772:
Wt/Gal: 8.20
% NVM: 75
Solvents: 6% Arom. MS
Gardner Color: 7 Max
Acid # (Solids): 10 Max
Viscosity: Z1-Z3
Reduced Viscosity: N-Q @ 60% in 6% Arom. MS
F Seta Flash Point: 105
Oil Type: Soya
An extremely durable long oil soya alkyd that provides the best performance in 2.8 lb/gal. industrial maintenance applications.

Modified:

REZIMAC 2493:
Wt/Gal: 7.80
% NVM: 50
Solvents: VMP/MS/T
Gardner Color: 12 Max
Acid # (Solids): 10-15
Viscosity: Z-Z2
F Seta Flash Point: 45
% Oil: 33
Oil Type: Linseed/Tall Oil
Mod. Type: Rosin
A short, rosin-modified vehicle for high gloss enamels with unusual hardness at the tack-free point. It forms tough, solvent-resistant films with good nonlifting properties.

REZIMAC 2626:
Wt/Gal: 8.10
% NVM: 60
Solvents: Xylol/VMP
Gardner Color: 10 Max
Acid # (Solids): 15-20
Viscosity: Z3-Z4
Reduced Viscosity: P-S @ 50% Xylol/VMP
F Seta Flash Point: 50
% Oil: 30
Oil Type: Linseed/Tung
Mod. Type: Rosin/Phenolic
A rosin and phenol-modified short oil which gives coatings very fast dry, excellent adhesion and alkali resistance. Can be used alone or as a modifier for other medium alkyds to improve dry and hardness.

MCWHORTER: Alkyds(Continued):

Modified(Continued):

DURAMAC 2675:
Wt/Gal: 7.95
% NVM: 60
Solvents: MS
Gardner Color: 10 Max
Acid # (Solids): 10 Max
Viscosity: V-Z
Reduced Viscosity: K-N @ 50% MS
F Seta Flash Point: 105
% Oil: 47
Oil Type: Soya
Mod. Type: Silicone
A silicone-modified medium oil alkyd which conforms to U.S. Bureau of Ships Spec TTE-490. It provides excellent gloss and gloss retention and is effective in heat resistant air-dry or baked coatings.

REZIMAC 2710:
Wt/Gal: 8.10
% NVM: 50
Solvents: Xylol
Gardner Color: 10 Max
Acid # (Solids): 26-32
Viscosity: X-Z
F Seta Flash Point: 80
% Oil: 32
Oil Type: Linseed/Tung
Mod. Type: Rosin/Phenolic
A short oil alkyd which is rosin and phenol-modified. It has excellent recoat and sanding properties. Its fast dry and outstanding adhesion allow use as a nonlifting lacquer primer. Meets Federal Spec. TT-P-664C.

REZIMAC 2721:
Wt/Gal: 9.10
% NVM: 75
Solvents: MPK/EEP/Xylol
Gardner Color: 10 Max
Acid # (Solids): 36-40
Viscosity: Z3-Z5
Reduced Viscosity: G-N @ 60% MPK/EEP
F Seta Flash Point: 45
Oil Type: Linseed/Tung
Mod. Type: Rosin/Phenolic
A high solids version of McWhorter's nonlifting lacquer primer. It has almost as fast a dry as REZIMAC 2710, and offers the same excellent recoat and adhesion. It can be formulated to 3.5 VOC.

MCWHORTER: Alkyds(Continued):

Modified(Continued):

REZIMAC 2764:
Wt/Gal: 7.45
% NVM: 49
Solvents: MS
Gardner Color: 9 Max
Acid # (Solids): 12 Max
Viscosity: X-Z
F Seta Flash Point: 105
% Oil: 45
Oil Type: TOFA
Mod. Type: Rosin
A rosin-modified medium oil which provides positive through-dry under adverse conditions. Has excellent color development and gloss, and very good exterior durability. Well-suited for porch and deck enamels.

REZIMAC 2773:
Wt/Gal: 8.75
% NVM: 75
Solvents: Xylol
Gardner Color: 10 Max
Acid # (Solids): 25 Max
Viscosity: Z3-Z5
F Seta Flash Point: 80
Oil Type: Soya
An air-dry, high solids, phenolic rosin-modified soya alkyd. It forms a tough film with excellent adhesion, recoat and sanding properties for compliance finishes below 3.5 VOC.

DURAMAC 8102:
Previous Product Name: VARKYD 333-60E
Wt/Gal: 7.85
% NVM: 60
Solvents: MS
Gardner Color: 6 Max
Acid # (Solids): 15 Max
Viscosity: V-Y
F Seta Flash Point: 105
% Oil: 45
Oil Type: Soya
Mod. Type: Silicone
A high quality silicone-modified alkyd resin with excellent heat resistance and outstanding gloss retention on exterior exposure.

MCWHORTER: Alkyds(Continued):

Thixotropic:

THIXAMAC 2766:
Wt/Gal: 7.05
% NVM: 37-40
Solvents: OMS
Gardner Color: 6 Max
Acid # (Solids): 10 Max
Viscosity: 102-112 KU
F Seta Flash Point: 105
% Oil: 55
Oil Type: Soya
Mod. Type: Polyamide
A soya medium oil with a low level of thixotropy. In odorless mineral spirits, it has applications in flat wall systems and in government spec paints. It promotes ease of application, is non-sagging, and non-setting. Meets Federal Spec. TT-P-30B.

THIXAMAC 2786:
Wt/Gal: 7.11
% NVM: 35
Solvents: OMS
Gardner Color: 7 Max
Acid # (Solids): 11 Max
Viscosity: 120-140 KU
F Seta Flash Point: 128
% Oil: 51
Oil Type: TOFA
Mod. Type: Polyamide
A medium length tall oil with a moderate level of thixotropy. In odorless mineral spirits, it can be used as a flat vehicle in primers and in odorless semi-gloss enamels.

THIXAMAC 6040:
Wt/Gal: 7.25
% NVM: 40
Solvents: MS
Gardner Color: 8 Max
Acid # (Solids): 12 Max
Viscosity: Soft Gel
F Seta Flash Point: 105
% Oil: 46
Oil Type: Mixture
Mod. Type: Polyamide/Rosin
A highly thixotropic medium soya alkyd which is used to modify long or medium oil alkyds in interior, semi-gloss enamels. It imparts hold-out over porous surfaces, and improves pigment wetting and dispersion.

MCWHORTER: Alkyds(Continued):

Thixotropic(Continued):

THIXAMAC 6041:
Wt/Gal: 7.19
% NVM: 40
Solvents: MS
Gardner Color: 9 Max
Acid # (Solids): 12 Max
Viscosity: Soft Gel
F Seta Flash Point: 105
% Oil: 38
Oil Type: Mixture
Mod. Type: Polyamide/Rosin
Highly thixotropic medium soya-tall oil alkyd made with isophthalic anhydride. Its principal use is as a modifier for long and medium oil alkyds. It enhances exterior durability.

THIXAMAC 6060:
Wt/Gal: 7.65
% NVM: 60
Solvents: MS
Gardner Color: 10 Max
Acid # (Solids): 12 Max
Viscosity: Soft Gel
F Seta Flash Point: 105
% Oil: 50
Oil Type: Mixture
Mod. Type: Polyamide/Rosin
A long soya-tall oil alkyd with a fairly high level of thixotropy. It can be used either as a sole vehicle or a modifier in low lustre semi-gloss and gloss enamels.

NL CHEMICALS, INC.: Oxidizing Alkyds:

KELSOL 3900:
Type: Chain Stopped
Percent Solids Weight: 75
Percent Solids Volume: 68.7
Solvent: B/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 130-180
Viscosity - G-H Approx.: Z6+
Gardner Color, Max.: 8
Acid Value (NV): 51-57
Lbs./Gal., Solution: 8.77
Lbs./Gal., Solids: 9.60
Flash Point: 100-139
Description: Fast Dry General Purpose
Typical Uses: Air Dry and Force Dry Industrial Metal Finishes

KELSOL 3902:
Type: Medium Oil
Percent Solids Weight: 75
Percent Solids Volume: 69.2
Solvent: B/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 120-170
Viscosity - G-H Approx.: Z6+
Gardner Color, Max.: 8
Acid Value (NV): 38-42
Lbs./Gal., Solution: 8.56
Lbs./Gal., Solids: 9.50
Flash Point: 100-139
Description: Corrosion Resistant-General Purpose
Typical Uses: Force Dry and Low Bake Industrial Metal Finishes; Dip and Flowcoat

KELSOL 3904:
Type: Medium Oil
Percent Solids Weight: 75
Percent Solids Volume: 69.4
Solvent: B/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 120-170
Viscosity - G-H Approx.: Z6+
Gardner Color, Max.: 8
Acid Value (NV): 38-42
Lbs./Gal., Solution: 8.64
Lbs./Gal., Solids: 9.40
Flash Point: 100-139
Description: Economical General Purpose
Typical Uses: Force Dry and Low Bake Industrial Metal Finishes

NL CHEMICALS, INC.: Oxidizing Alkyds(Continued):

KELSOL 3905:
Type: Short Oil
Percent Solids Weight: 75
Percent Solids Volume: 69.7
Solvent: B2/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 80-120
Viscosity - G-H approx.: Z5+
Gardner Color, Max.: 8
Acid Value (NV): 38-42
Lbs./Gal., Solution: 8.56
Lbs./Gal., Solids: 9.20
Flash Point: 73-99
Description: Very Stable, General Purpose
Typical Uses: Force Dry and Low Bake Industrial Metal Finishes; Dip and Flowcoat

KELSOL 3906:
Type: Short Oil
Percent Solids Weight: 75
Percent Solids Volume: 69.4
Solvent: B2/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 130-180
Viscosity - G-H Approx.: Z6+
Gardner Color, Max.: 8
Acid Value (NV): 38-42
Lbs./Gal., Solution: 8.64
Lbs./Gal., Solids: 9.30
Flash Point: 73-99
Description: Corrosion Resistant, Faster Dry than KELSOL 3902
Typical Uses: Air Dry and Force Dry Industrial Metal Finishes; Dip and Flowcoat

KELSOL 3907:
Type: Short Oil
Percent Solids Weight: 75
Percent Solids Volume: 69.5
Solvent: B2/G2
Solvent Percentages: 50/50
Viscosity - Stokes: 160-210
Viscosity - G-H approx.: Z6+
Gardner Color, Max.: 8
Acid Value (NV): 39-43
Lbs./Gal., Solution: 8.56
Lbs./Gal., Solids: 9.30
Flash Point: 73-99
Description: Very Fast Dry
Typical Uses: Air Dry and Force Dry Industrial Metal Finishes; Dip and Flowcoat; Inks

NL CHEMICALS, INC.: Oxidizing Alkyds(Continued):

KELSOL 3909:
Type: Medium Oil
Percent Solids Weight: 75
Percent Solids Volume: 69.4
Solvent: B/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 90-120
Viscosity - G-H approx.: Z5+
Gardner Color, Max.: 8
Acid Value (NV): 36-38
Lbs./Gal., Solution: 8.56
Lbs./Gal., Solids: 9.30
Flash Point: 100-139
Description: Corrosion Resistant in Very Thin Films
Typical Uses: Force Dry and Low Bake Industrial Metal Finishes

KELSOL 3910:
Type: Medium Oil
Percent Solids Weight: 75
Percent Solids Volume: 70.0
Solvent: B2/G4
Solvent Percentages: 64/36
Viscosity - Stokes: 120-180
Viscosity - G-H Approx.: Z6+
Gardner Color, Max.: 7
Acid Value (NV): 39-43
Lbs./Gal., Solution: 8.66
Lbs./Gal., Solids: 9.23
Flash Point: 100-139
Description: Economical, Very Stable, Good Flexibility
Typical Uses: Air Dry and Force Dry Industrial Metal Finishes, Flexible, Crosslinked Films and Air Dry

KELSOL 3918:
Type: Short Oil
Percent Solids Weight: 70
Percent Solids Volume: 64.6
Solvent: B2/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 90-130
Viscosity - G-H Approx.: Z5+
Gardner Color, Max.: 8
Acid Value (NV): 37-41
Lbs./Gal., Solution: 8.53
Lbs./Gal., Solids: 9.10
Flash Point: 73-99
Description: Economical, Good Corrosion Resistance
Typical Uses: Air Dry and Force Dry Industrial Metal Finishes

NL CHEMICALS, INC.: Oxidizing Alkyds(Continued):

KELSOL 3919:
Type: Chain Stopped
Percent Solids Weight: 70
Percent Solids Volume: 64.0
Solvent: B2/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 90-130
Viscosity - G-H Approx.: Z5+
Gardner Color, Max.: 8
Acid Value (NV): 33-37
Lbs./Gal., Solution: 8.65
Lbs./Gal., Solids: 9.30
Flash Point: 73-99
Description: Economical, Good Corrosion Resistance
Typical Uses: Air Dry and Force Dry Industrial Metal Finishes

KELSOL 3922:
Type: Long Oil
Percent Solids Weight: 80
Percent Solids Volume: 78.2
Solvent: G2/G5
Solvent Percentages: 75/25
Viscosity - Stokes: 90-130
Viscosity - G-H Max.: Z5+
Gardner Color, Max.: 8
Acid Value (NV): 52-58
Lbs./Gal., Solution: 8.64
Lbs./Gal., Solids: 8.90
Flash Point: 140-199
Description: Trade Sales
Typical Uses: Gloss/Semi-Gloss Brushing Enamels for Interior/Exterior

KELSOL 3950:
Type: Phenolic Modified
Percent Solids Weight: 70
Percent Solids Volume: 65.0
Solvent: B2/G4
Solvent Percentages: 70/30
Viscosity - Stokes: 45-70
Viscosity - G-H Approx.: Z3+
Gardner Color, Max.: 9
Acid Value (NV): 39-43
Lbs./Gal., Solution: 8.48
Lbs./Gal., Solids: 9.10
Flash Point: 100-139
Description: Excellent Lift and Bleed Resistance Early Recoat
Typical Uses: Air Dry and Force Dry Primers

NL CHEMICALS, INC.: Oxidizing Alkyds(Continued):

KELSOL 3960:
Type: Chain Stopped
Percent Solids Weight: 75
Percent Solids Volume: 69.4
Solvent: B2/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 120-180
Viscosity - G-H:: Z6+
Gardner Color, Max.: 8
Acid Value (NV): 37-41
Lbs./Gal. Solution: 8.64
Lbs./Gal. Solids: 9.40
Flash Point: 73-99
Description: Excellent Corrosion and Water Resistance
Typical Uses: Air Dry and Force Dry General Metal Finishes; Implements

KELSOL 3961:
Type: Chain Stopped
Percent Solids Weight: 75
Percent Solids Volume: 69.1
Solvent: B2/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 130-180
Viscosity - G-H: Z6+
Gardner Color, Max.: 8
Acid Value (NV): 35-39
Lbs./Gal., Solution: 8.76
Lbs./Gal., Solids: 9.53
Flash Point: 73-99
Description: Fast Dry, Corrosion Resistance, High Hydroxyl Value
Typical Uses: Air Dry, Force Dry and Bake, Industrial Metal Finishes

KELSOL 3962:
Type: Chain Stopped
Percent Solids Weight: 70
Percent Solids Volume: 65.0
Solvent: B2/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 90-130
Viscosity - G-H: Z5+
Gardner Color, Max.: 8
Acid Value (NV): 33-37
Lbs./Gal., Solution: 8.6
Lbs./Gal., Solids: 9.29
Flash Point: 73-99
Description: Excellent Corrosion Resistance, Excellent Wet Adhesion, High Hydroxyl Value
Typical Uses: Air Dry, Force Dry and Bake Industrial Metal Finishes

NL CHEMICALS, INC.: Oxidizing Alkyds(Continued):

KELSOL 3963:
Type: Chain Stopped
Percent Solids Weight: 70
Percent Solids Volume: 64.0
Solvent: B2/G4
Solvent Percentages: 50/50
Viscosity - Stokes: 90-130
Viscosity - G-H: Z5-Z6
Gardner Color, Max.: 8
Acid Value (NV): 33-37
Lbs./Gal., Solution: 8.55
Lbs./Gal., Solids: 9.30
Flash Point: 73-99
Description: Excellent Corrosion, Humidity, Water Resistance
Typical Uses: Air Dry, Force Dry and Bake Industrial Metal Finishes

KELSOL 3970:
Type: Silicone Modified
Percent Solids Weight: 75
Percent Solids Volume: 70.5
Solvent: G4
Solvent Percentages: 100
Viscosity - Stokes: 45-120
Viscosity - G-H: Z5+
Gardner Color, Max.: 8
Acid Value (NV): 39-43
Lbs./Gal., Solution: 8.99
Lbs./Gal., Solids: 9.37
Flash Point: 140-199
Description: Best Exterior Durability, Good Heat Resistance
Typical Uses: Maintenance Topcoats, Heat Resistant Finishes; Overprint Varnishes

AROLON 580:
Type: Dispersion
Percent Solids Weight: 42
Percent Solids Volume: 38.5
Solvent: W
Solvent Percentages: 100
Viscosity: 700-2500 cps
Gardner Color, Max.: Milky
Lbs./Gal., Solution: 8.89
Lbs./Gal., Solids: 9.70
Description: Medium Dry
Typical Uses: Latex Modifier, Interior Gloss Brushing Enamels

NL CHEMICALS, INC.: Oxidizing Alkyds(Continued):

AROLON 585:
Type: Dispersion
Percent Solids Weight: 43
Percent Solids Volume: 38.6
Solvent: W
Solvent Percentages: 100
Viscosity: 300-1500 cps
Gardner Color, Max.: Milky
Lbs./Gal., Solution: 8.92
Lbs./Gal., Solids: 9.90
Flash Point: >200
Description: Fast Dry Lift Resistant
Typical Uses: Fast Dry Industrial Primers

AROLON 921:
Type: Styrene Modified
Percent Solids Weight: 70
Percent Solids Volume: 65.4
Solvent: G4
Solvent Percentages: 100
Viscosity - Stokes: 50-100
Viscosity - G-H: Z3-Z5
Gardner Color, Max.: 9
Acid Value (NV): 58-68
Lbs./Gal., Solution: 8.60
Lbs./Gal., Solids: 9.20
Flash Point: 100-199
Description: Copolymer Fast Dry
Typical Uses: Air Dry, Force Dry and Bake For General Industrial Finishes

AROLON 970:
Type: Styrene Modified
Percent Solids Weight: 70
Percent Solids Volume: 67.7
Solvent: G4
Solvent Percentages: 100
Viscosity - Stokes: 144-268
Viscosity - G-H: Z6+
Gardner Color, Max.: 8
Acid Value (NV): 65-75
Lbs./Gal., Solution: 8.72
Lbs./Gal., Solids: 9.09
Flash Point: 140-199
Description: Copolymer Fast Dry High Drink
Typical Uses: Air Dry, Force Dry and Bake for General Industrial Finishes

NL CHEMICALS, INC.: Non-Oxidizing Alkyd:

KELSOL 3980:
Type: Coconut Alkyd
Percent Solids Weight: 75
Percent Solids Volume: 70.0
Solvent: G4
Solvent Percentages: 100
Viscosity - Stokes: 120-180
Viscosity - G-H: Z6+
Gardner Color, Max.: 5
Acid Value (NV): 52-58
Lbs./Gal., Solution: 8.98
Lbs./Gal., Solids: 9.60
Flash Point: 140-199
Description: Excellent Color Retention in Overbake
Typical Uses: Baking Finishes for General Industrial Finishes

Solvent Legend:
B: n-Butanol
B2: sec-Butanol
G: Propoxy Propanol/Diethylene Glycol n-Butyl Ether
G2: Propoxy Propanol
G3: W/G2/G4/G5
G4: Butoxy Ethanol
G5: Diethylene Glycol n-Butyl Ether
G6: Ektasolve EP
W: Water

C.J. OSBORN: Long Oil Alkyds:

Alkyds that have a low phthalic content. These alkyds are generally soluble in aliphatic solvents. They will generally serve the industrial and interior and exterior architectural market.

05-A-0565:
Long oil alkyd
% Non-volatile: 82-84
Solvent: Exempt MS
Viscosity: X-Y
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: Specially selected acids
WPG: 8.40
A long oil, color retentive architectural type vehicle. Premium resin for best interior and exterior enamel formulations.

05-2164:
Long oil latex modifier
% Non-Volatile: 100
Solvent: None
Viscosity: Z3-Z5
Color (Gardner): 9 max.
Acid Number (Solids): 10 max.
Modifying Oil: Linseed oil
WPG: 8.50
Additive for exterior latex paints to impart improved adhesion and durability over chalky surfaces.

05-2165:
Long oil latex modifier
% Non-Volatile: 100
Solvent: None
Viscosity: Z2-Z4
Color (Gardner): 7 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 8.50
Additive for exterior latex paints to impart improved adhesion and durability over chalky surfaces.

C.J. OSBORN: Long Oil Alkyds(Continued):

05-2263:
Long oil oxidizing
% Non-Volatile: 69-71
Solvent: Exempt MS
Viscosity: Y-Z1
Color (Gardner): 12 max.
Acid Number (Solids): 10 max.
Modifying Oil: Linseed
WPG: 8.00
Meets Federal Spec. TT-R-266D Type II Class A.

05-2271:
Long oil isophthalic alkyd
% Non-Volatile: 69-71
Solvent: Exempt MS
Viscosity: Y-Z
Color (Gardner): 12 max.
Acid Number (Solids): 12 max.
Modifying Oil: Fish oil
WPG: 8.00
Low cost maintenance enamel, trim and trellis, barn paint structural steel and rust-inhibitive paints and primers.

05-2358:
Flat Alkyd
% Non-Volatile: 39-41
Solvent: Odorless MS
Viscosity: Z2-Z4
Color (Gardner): 9 max.
Acid Number (Solids): 14 max.
Modifying Oil: TOFA
WPG: 7.20
For interior and semi-gloss paint.

05-2388 EX:
Long oil
% Non-Volatile: 69-71
Solvent: Exempt MS
Viscosity: Z-Z2
Color (Gardner): 7 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 8.00
Meets Fed. spec. TT-R-266 D Type I Class A. Interior architectural enamels, brushing, levelling and non-sagging are outstanding features of this product.

C.J. OSBORN: Long Oil Alkyds(Continued):

05-2389-60:
Long oil alkyd
% Non-Volatile: 59-61
Solvent: Exempt MS
Viscosity: U-W
Color (Gardner): 7 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 7.65
Architectural gloss or semi-gloss enamels with good color and color retention.

05-2627:
Long oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: Y-Z1
Color (Gardner): 9 max.
Acid Number (Solids): 10 max.
Modifying Oil: Fish oil
WPG: 7.45
Low cost vehicle with superior wetting designed for maintenance enamels & primers.

05-2657:
Long oil alkyd
% Non-Volatile: 83-85
Solvent: Exempt MS
Viscosity: T-U
Color (Gardner): 7 max.
Acid Number (Solids): 7 max.
Modifying Oil: Soya/Linseed
WPG: 7.90
Alkyd exterior house paint, uniform gloss, excellent flow, easy brushing at high viscosities.

05-2677:
Long oil isophthalic acid alkyd
% Non-Volatile: 89-91
Solvent: Exempt MS
Viscosity: V-X
Color (Gardner): 8 max.
Acid Number (Solids): 9 max.
Modifying Oil: Linseed
WPG: 8.00
This resin meets Federal specification TT-P-102 and may be used in meeting TT-P-81. Exhibits excellent gloss retention and flexibility.

C.J. OSBORN: Long Oil Alkyds(Continued):

05-2773:
Pure long oil drying alkyd
% Non-Volatile: 52-54
Solvent: Exempt MS
Viscosity: P-Q
Color (Gardner): 4-6
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 7.60
Good general purpose enamel vehicle.

05-A-3976:
Type: Long oil alkyd
% Non-Volatile: 69-71
Solvent: Odorless MS
Viscosity: Z6-Z8
Color (Gardner): 8 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya FA
WPG: 7.85
Interior, exterior architectural enamels brushing levelling, non sagging properties.

05-4336:
Long oil alkyd
% Non-Volatile: 59-61
Solvent: Exempt MS
Viscosity: U-W
Color (Gardner): 7 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 7.65
Meets TT-R-226 Type I Class B.

05-A-5416:
High solid, long oil alkyd
% Non-Volatile: 79-81
Solvent: Exempt MS
Viscosity: Z3-Z5
Color (Gardner): 10 max.
Acid Number (Solids): 12 max.
Modifying Oil: Linseed
WPG: 8.22
Interior & exterior architectural enamel.

C.J. OSBORN: Long Oil Alkyds(Continued):

05-A-5632:
Long oil latex modifier
% Non-Volatile: 100
Solvent: None
Viscosity: Z1-Z3
Color (Gardner): 7 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 8.45
Designed for latex modification to increase adhesion and chalk resistance.

05-A-6419:
Long oil alkyd
% Non-Volatile: 69-71
Solvent: Exempt MS
Viscosity: X-Z
Color (Gardner): 8 max.
Acid Number (Solids): 12 max.
Modifying Oil: Soya FA
WPG: 7.98
Architectural enamel, premium quality, good color retention.

05-A-6610:
Long oil alkyd
% Non-Volatile: 59-61
Solvent: Exempt MS
Viscosity: Z-Z2
Color (Gardner): 7 max.
Acid Number (Solids): 8 max.
Modifying Oil: Soya
WPG: 7.85
High quality architectural enamels.

C.J. OSBORN: Medium Oil Alkyds:

Alkyds that have a medium phthalic content. These alkyds are generally soluble in aromatic and/or aliphatic solvents. These alkyds will generally serve the industrial and architectural interior and exterior coatings market both for bakes and air-dry.

04-108:
Pure soya medium alkyd
% Non-Volatile: 54-56
Solvent: Exempt MS
Viscosity: Z4-Z6
Color (Gardner): 6 max.
Acid Number (Solids): 12 max.
Modifying Oil: Soya
WPG: 7.70
This product has excellent levelling and flow characteristics along with fast air drying and a fast baking rate. It has excellent gloss and gloss retention as well as excellent color and color retention. This product also has good compatability with other alkyds, oils, and varnishes. It may be used in the following applications: metal decorating, architectural white enamels, air dry and baked coatings for general use.

04-A-0427:
Flat alkyd
% Non-volatile: 34-36
Solvent: Odorless MS
Viscosity: T-W
Color (Gardner): 5 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 7.10
Interior flat and semi-gloss paints.

04-A-0911:
Type: Medium oil alkyd
% Non-Volatile: 59-61
Solvent: 88% Solvesso 100
12% Xylol
Viscosity: Y-Z1
Color (Gardner): 5 max.
Acid Number (Solids): 15 max.
Modifying Oil: TOFA
WPG: 8.33
Fast drying industrial enamel and good drying properties with good color and gloss retention.

C.J. OSBORN: Medium Oil Alkyds(Continued):

04-A-1199:
Medium oil alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Z1-Z3
Color (Gardner): 14 max.
Acid Number (Solids): 25 max.
Modifying Oil: Fish oil
WPG: 8.22
Designed for good pigment wetting and drying properties.

04-1871:
Medium oil alkyd
% Non-Volatile: 39-41
Solvent: 75% Exempt VMP Naphtha
25% Exempt MS
Viscosity: V-W
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA/Linseed
WPG Average: 7.20
Fast dry implement maintenance enamels with excellent adhesion and durability.

04-2264:
Medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: Y-Z1
Color (Gardner): 10 Max.
Acid Number (Solids): 10 max.
Modifying Oil: Linseed/Soya
WPG: 7.65
Medium oil alkyd meeting TT-R-266-D Type III.

04-2472 G-60:
Medium oil alkyd
% Non-Volatile: 59-61
Solvent: Aromatic petroleum
Viscosity: V-W
Color (Gardner): 5 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA/Castor
WPG: 8.35
Recommended for roller coat applications, metal deco. areas.

C.J. OSBORN: Medium Oil Alkyds(Continued):

04-2486:
Alkyd flat vehicle
% Non-Volatile: 29-31
Solvent: Exempt MS
Viscosity: Z2-Z4
Color (Gardner): 4 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 7.00
Interior flat and semi-gloss paints.

04-2627:
Pure medium marine oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: Y-Z
Color (Gardner): 9 max.
Acid Number (Solids): 10 max.
Modifying Oil: Fish Oil
WPG: 7.45
Excellent as a low cost trim & trellis enamel. Has excellent outdoor durability as a maintenance enamel vehicle.

04-3052:
Medium length pure soya alkyd
% Non-Volatile: 59-61
Solvent: Exempt MS
Viscosity: Z6-Z8
Color (Gardner): 6 max.
Acid Number (Solids): 6 max.
Modifying Oil: Soya
WPG: 7.90
White exterior enamels, implement enamels and metal decorating enamels.

04-A-4295:
Linseed modified alkyd
% Non-Volatile: 59-61
Solvent: Exempt (Xylol, VM&P, Isobutanol)
Viscosity: Z1-Z
Color (Gardner): 8 max.
Acid Number (Solids): 30 max.
Modifying Oil: Linseed
WPG: 8.10
Excellent resistance to abrasion, hydrocarbons and water making it a very good vehicle for fast set and quick dry primers and topcoats.

C.J. OSBORN: Medium Oil Alkyds(Continued):

04-4337:
Medium oil, air-dry and baking alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: Z1-Z3
Color (Gardner): 9 max.
Acid Number (Solids): 10 max.
Modifying Oil: Linseed
WPG: 7.70
Fast dry implement and maintenance enamels; has excellent adhesion and durability.

04-A-4472:
Medium oil alkyd
% Non-Volatile: 69-71
Solvent: Xylol
Viscosity: Z4-Z6
Color (Gardner): 8 max.
Acid Number (Solids): 15 max.
Modifying Oil: TOFA
WPG: 8.64
This resin finds use in air-dry and baking applications. It has a good range of compatibility with crosslinkers & film formers.

04-A-4509:
Oxidizing alkyd
% Non-Volatile: 69-71
Solvent: Xylol
Viscosity: Z4-Z6
Color (Gardner): 8 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 8.50
Fast dry, medium oil alkyd compatible with vinyl resins like UC VROH.

04-A-5642:
Medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt VMP Naphtha
Viscosity: Z4-Z6
Color (Gardner): 8 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 7.60
Fast dry implement enamel.

C.J. OSBORN: Medium Oil Alkyds(Continued):

04-A-5913:
Medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: Z4-Z6
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA/Linseed
WPG: 7.64
Fast dry implement and maintenance enamels.

04-A-6143:
Medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: X-Z
Color (Gardner): 7 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 7.63
Fast dry implement enamel.

04-A-6230:
Medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS, Xylol
Viscosity: Z1-Z3
Color (Gardner): 6 max.
Acid Number (Solids): 12 max.
Modifying Oil: Soya/Tung Oil
WPG: 7.77
Industrial and farm implement enamels.

04-A-6231:
Medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: Z2-Z4
Color (Gardner): 7 max.
Acid Number (Solids): 12 max.
Modifying Oil: Soya
WPG: 7.61
Fast dry implement enamel.

C.J. OSBORN: Medium Oil Alkyds(Continued):

04-A-6451A:
Pure medium oil alkyd
% Non-Volatile: 69-71
Solvent: Xylol
Viscosity: Z4-Z6
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 8.50
Truck enamels, automotive finishes, rapid dry industrial finishes including applications as pumps, machinery and other industrial equipment. When used alone with amine resins, this product converts more rapidly when baked than other alkyds of similar oil length. This resin merits evaluation for its adhesion, flexibility & compatibility with a wide range of other film formers.

04-7228:
Medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: V-W
Color (Gardner): 7 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 7.54
Fast air-dry enamels excellent color and gloss retention.

04-7378:
Pure medium oil alkyd
% Non-Volatile: 69-71
Solvent: Xylol
Viscosity: Z5-Z6
Color (Gardner): 6 max.
Acid Number (Solids): 15 max.
Modifying Oil: Safflower
WPG: 8.50
Truck enamels, automotive finishes, rapid drying industrial finishes including such applications as pumps, machinery and other industrial equipment. When used alone with amine resins, MIRASOL 04-7378 converts more rapidly when baked than other alkyds of similar oil length. This resin merits eveluation for its adhesion, flexibility and unusual compatibilities with a wide range of other film-formers.

C.J. OSBORN: Medium Oil Alkyds(Continued):

04-8242:
Pure medium marine oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: Z-Z2
Color (Gardner): 9 max.
Acid Number (Solids): 10 max.
Modifying Oil: Fish Oil
WPG: 7.40
Maintenance enamel vehicle which exhibits excellent outdoor durability; also excellent for use as a low cost trim and trellis enamel vehicle primer.

04-9074:
Pure soya medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: U-W
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 7.60
Fast air dry enamels combine good brushing, excellent color and gloss retention. Metal decorating, good application properties, flow and color, and gloss retention.

C.J. OSBORN: Short Oil Alkyds:

Alkyds that have a high phthalic content. These alkyds are generally soluble in strong, aromatic solvents. These alkyds will generally serve the industrial market for both bake and air-dry.

03-90:
Pure drying oil modified alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: X-Z1
Color (Gardner): 7 max.
Acid Number (Solids): 14 max.
Modifying Oil: Linseed
WPG: 8.30
Industrial formulations for spray coating, both air dry and baking as well as colored enamels based on urea and melamine resins for baking. This is an oxidizing type resinous plasticizer for nitrocellulose lacquers. It may also be used in metal furniture, baking enamels, automotive refinishing enamels and air dry primers and finishes.

03-107:
Pure semi-drying oil alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Y-Z1
Color (Gardner): 6 max.
Acid Number (Solids): 14 max.
Modifying Oil: Soya
WPG: 8.20
For white and colored baking and air dry enamels for interior and exterior use. It is used with nitrocellulose lacquers; this product improves durability, adhesion and toughness.

03-107 EX:
Pure semi-drying oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt
Viscosity: Z2-Z5
Color (Gardner): 6 max.
Acid Number (Solids): 14 max.
Modifying Oil: Soya
WPG: 7.80
For white and colored baking and air dry enamels for interior and exterior use. Used with nitrocellulose lacquers this product improves durability, adhesion and toughness.

C.J. OSBORN: Short Oil Alkyds(Continued):

03-107 XB:
Pure semi-drying oil alkyd
% Non-Volatile: 59-61
Solvent: 95% Xylol
5% Butanol
Viscosity: Z3-Z5
Color (Gardner): 7 Max.
Acid Number (Solids): 14 max.
Modifying Oil: Soya FA
WPG: 8.60
White and colored baking and air dry enamels for interior and exterior use. Used with nitrocellulose lacquers, it improves durability, adhesion and toughness.

03-305:
Pure drying oil modified alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Y-Z1
Color (Gardner): 7 max.
Acid Number (Solids): 14 max.
Modifying Oil: Dehydrated castor
WPG: 8.50
This product has toughness and adhesion and good outdoor durability and may be used as a vehicle for metal finishes, both interior and exterior. Its compatibility with nitrocellulose permits better adhesion, toughness and exterior durability in lacquers.

03-0733:
Short oil pure alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Z2-Z4
Color (Gardner): 3 max.
Acid Number (Solids): 16 max.
Modifying Oil: Special selected acids
WPG: 8.30
For fast dry millwork primers, metal primers and topcoats. Fairly good exterior durability; it's also used in lacquer and conversion coatings.

C.J. OSBORN: Short Oil Alkyds(Continued):

03-1568:
Baking or air dry industrial finishing alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Z3-Z5
Color (Gardner): 6 max.
Acid Number (Solids): 12 max.
Modifying Oil: TOFA
WPG: 8.00
A general purpose industrial baking finish, good urea and melamine compatibility, good aliphatic solvent tolerance. Also available in exempt solvents.

03-1743:
Short isophthalic industrial roller coating alkyd
% Non-Volatile: 59-61
Solvent: Amsco G
Viscosity: Z4-Z6
Color (Gardner): 6 max.
Acid Number (Solids): 16 max.
Modifying Oil: TOFA
WPG: 8.50
Outstanding adhesion plus gloss and color retention for coil coatings and roller coat enamels.

03-2314:
Short oil alkyd
% Non-Volatile: 49-51
Solvent: 50% Solvesso 100
50% Solvesso 150
Viscosity: Z1-Z3
Color (Gardner): 5 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 8.30
Excellent flow and leveling roller coating applications fast solvent release, outstanding adhesion and flexibility plus excellent color retention, strongly qualify this product for general roll coat and metal decorating applications.

03-2314-4X:
Medium short oil industrial finish isophthalic alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Z1-Z3
Color (Gardner): 5 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 8.25
Excellent industrial baking finish, outstanding adhesion and flexibility, excellent color retention.

C.J. OSBORN: Short Oil Alkyds(Continued):

03-2318:
Pure short oil linseed alkyd
% Non-Volatile: 59-61
Solvent: Xylol
Viscosity: Z-Z2
Color (Gardner): 9 max.
Acid Number (Solids): 25 max.
Modifying Oil: Linseed
WPG: 8.50
Air dry or baking industrial finishes, good exterior durability.

03-2591:
Short oil pure alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Z2-Z4
Color (Gardner): 4 max.
Acid Number (Solids): 10 max.
Modifying Oil: Special fatty acids
WPG: 8.40
Fast dry millwork primers, metal primers and topcoats. Fairly good exterior durability; this product may also be used in lacquer.

03-2779:
Short oil industrial finish alkyd
% Non-volatile: 59-61
Solvent: Xylol
Viscosity: X-Z
Color (Gardner): 4 max.
Acid Number (Solids): 25 max.
Modifying Oil: TOFA
WPG: 8.40
Flexible substrates such as paper coatings, etc. Exhibits good adhesion and flexibility and outstanding wear and mar resistance.

03-2813:
Baking industrial finishing alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Z5-Z6
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 8.30
This product may be used as a general purpose spray for industrial baking finishes. It has good urea and melamine compatibility as well as good aliphatic solvent tolerance. May also be supplied in Amsco G (MIRASOL 03-2813-G50) for roller coat applications.

C.J. OSBORN: Short Oil Alkyds(Continued):

03-3254:
Pure short oil alkyd
% Non-Volatile: 49-51
Solvent: Solvesso 100
Viscosity: Z2-Z4
Color (Gardner): 7 max.
Acid Number (Solids): 14 max.
Modifying Oil: Dehydrated castor
WPG: 8.40
This product has toughness & outdoor durability. It may be used as the vehicle for metal finishes, both interior and exterior. Its compatibility with nitrocellulose permits better adhesion, toughness, exterior durability in lacquers. It does not have as fast a set as MIRASOL 03-305.

03-A-3263:
Chain stopped alkyd
% Non-Volatile: 74-76
Solvent: Xylol
Viscosity: Z4-Z6
Color (Gardner): 8 max.
Acid Number (Solids): 12 max.
Modifying Oil: Soya
WPG: 8.82-8.92
This chain stopped alkyd is designed for compatibility with a variety of film formers like CAB, NC, vinyls, chlorinated rubbers, urea & melamine resins. It is therefore very useful in a variety of applications, air dry and bake.

03-A-3882:
Short oil alkyd
% Non-Volatile: 69-71
Solvent: Xylol
Viscosity: Z3-Z5
Color (Gardner): 6 max.
Acid Number (Solids): 3 max.
Modifying Oil: Special selected acids
WPG: 8.80
An excellent product for both air dry and baking applications; low acid numbers, good tolerance for low KB solvents and slow viscosity reduction makes this product an interesting alkyd for the formulator of industrial finishes.

C.J. OSBORN: Short Oil Alkyds(Continued):

03-A-3297:
Chain stopped alkyd
% Non-Volatile: 59-61
Solvent: Exempt VMP
Isobutanol
Viscosity: Z-Z2
Color (Gardner): 5 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 8.01
Industrial bake finishes.

03-A-4374:
High solid, short oil alkyd
% Non-Volatile: 89-91
Solvent: Xylol, Dow BC-300
Viscosity: Y-Z2
Color (Gardner): 8 max.
Acid Number (Solids): 15 max.
Modifying Oil: TOFA
WPG: 9.05
High solid, low viscosity short oil alkyd suitable for cross-linking with melamine and urea resins. It has good application in industrial coatings.

03-A-4477:
Baking or air dry industrial finishing alkyd
% Non-Volatile: 79-81
Solvent: MEK/PM Glycol ether
Viscosity: Z2-Z4
Color (Gardner): 9 max.
Acid Number (Solids): 12 max.
Modifying Oil: TOFA
WPG: 8.99
General purpose industrial baking finish with good urea and melamine compatibility. Has good aliphatic solvent tolerance and is an excellent high solid vehicle.

03-A-4855:
Chain stopped alkyd
% Non-Volatile: 69-71
Solvent: Xylol
Viscosity: Z4-Z6
Color (Gardner): 8 max.
Acid Number (Solids): 15 max.
Modifying Oil: TOFA
WPG: 8.60
This chain stopped alkyd has been designed for compatibility with a variety of film formers like CAB, NC, vinyls, chlorinated rubbers, urea & melamine resins. It is therefore very useful in a variety of applications, air dry and bake.

C.J. OSBORN: Short Oil Alkyds(Continued):

03-A-5766:
Short oil alkyd
% Non-Volatile: 39-41
Solvent: Solvesso 150
Viscosity: G-J
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 8.30
General purpose baking alkyd.

03-A-5344:
High solid, short oil alkyd
% Non-Volatile: 89-91
Solvent: PM Acetate
Viscosity: Z1-Z3
Color (Gardner): 8 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 8.90
This is a high solid industrial finish.

03-A-5698:
High solid, short oil alkyd
% Non-Volatile: 89-91
Solvent: PM Acetate
Viscosity: Z4-Z6
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 9.00
This is a flexible, short oil alkyd designed to impart characteristics that cannot be obtained by the use of conventional short oil alkyds. Coatings may be formulated at high solids that retain their flexibility even after extended baking. This product has excellent pigment wetting, gloss and durability.

03-A-5885:
High solid baking alkyd
% Non-Volatile: 89-91
Solvent: Butyl acetate
Viscosity: Z2-Z4
Color (Gardner): 6 max.
Acid Number (Solids): 12 max.
Modifying Oil: TOFA
WPG: 8.95
This product is a general purpose short oil high solid baking alkyd.

C.J. Osborn: Short Oil Alkyds(Continued):

03-A-6633:
High solid short oil alkyd
% Non-Volatile: 89-91
Solvent: Xylol, butanol
Viscosity: Z4-Z6
Color (Gardner): 8 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 8.89
This product is a premium high solid industrial finish.

03-A-7015:
High solid short oil alkyd
% Non-Volatile: 89-91
Solvent: Butyl cellosolve, xylol
Viscosity: Z6-Z8
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 8.95
This is a high solid vehicle noticeable for pigment wetting, hardness which has excellent baking properties.

03-9898:
Short oil alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: W-Z
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: Soya
WPG: 8.30
This product is a high quality short oil alkyd designed for maximum gloss & color retention; used to produce air dry and baking finishes with unusual film integrity and adhesion.

C.J. OSBORN: Short Oil Alkyds(Continued):

03-9899:
High solid, short oil alkyd
% Non-Volatile: 89-91
Solvent: PM Acetate
Viscosity: Z4-Z6
Color (Gardner): 6 max.
Acid Number (Solids): 10 max.
Modifying Oil: TOFA
WPG: 9.00
This is a flexible short oil alkyd designed to impart a combination of characteristics which may not be obtained by the use of conventional short alkyds. Coatings may be formulated at high solids that retain their flexibility even after extended bake schedules. Excellent wetting of pigments and excellent durability & gloss are notable characteristics of this product.

03-A-9938:
Short oil alkyd
% Non-Volatile: 54-56
Solvent: Solvesso 150 30%
Solvesso 100 10%
Butanol 5%
Viscosity: Z-Z2
Color (Gardner): 5 max.
Acid Number (Solids): 12 max.
Modifying Oil: Soya
WPG: 8.45
Industrial baking finishes.

C.J. OSBORN: Non-Drying Alkyds:

Non-drying alkyds are used as non-migrating plasticizers in lacquers and as a building block in the crosslinking of urea-formaldehyde, melamines and urethanes. They find application in automotive, appliance, furniture and other industrial finishes.

01-121:
Pure non-drying oil modified alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: Z-Z2
Color (Gardner): 6 max.
Acid Number (Solids): 36 max.
Modifying Oil: Cottonseed
WPG: 8.40
A resinous plasticizer for nitrocellulose lacquers both clear and pigmented.

01-124:
Pure non-drying alkyd
% Non-volatile: 79-81
Solvent: Xylol
Viscosity: M-P
Color (Gardner): 7 max.
Acid Number (Solids): 20 max.
Modifying Oil: Coconut
WPG: 8.47
Resin plasticizer for nitrocellulose. Being longer in oil has a more pronounced plasticizing effect. For use in high solids lacquers.

01-126:
Pure non-drying alkyd
% Non-Volatile: 59-61
Solvent: Xylol
Viscosity: Z-Z2
Color (Gardner): 6 max.
Acid Number (Solids): 20 max.
Modifying Oil: Castor
WPG: 8.30
High quality furniture and other wood lacquers. Non-lifting with good adhesion. High quality baking enamels with good toughness, adhesion and gloss.

C.J. OSBORN: Non-Drying Alkyds(Continued):

01-127-65X:
Pure non-drying alkyd
% Non-Volatile: 64-66
Solvent: Xylol
Viscosity: X-Z
Color (Gardner): 8 max.
Acid Number (Solids): 11 max.
Modifying Oil: Castor (partially dehydrated)
WPG: 8.55
Resinous plasticizer for nitrocellulose lacquers, amine baking finishes and vinyl systems. It can be used as the only plasticizer or in combination with chemical or other resinous plasticizers with which it may be compatible.

01-129A:
Pure non-drying (lauric acid modified alkyd)
% Non-Volatile: 49-51
Solvent: Xylol: 76%
MEK: 6%
Isopropanol: 18%
Viscosity: D-G
Color (Gardner): 4 max.
Acid Number (Solids): 56 max.
Modifying Oil: Lauric
WPG: 8.33
Nitrocellulose lacquer where color and adhesion are prime requisites.

01-131:
Non-drying plasticizing type alkyd
% Non-Volatile: 79-81
Solvent: Toluol
Viscosity: U-W
Color (Gardner): 4 max.
Acid Number (Solids): 10 max.
Modifying Oil: None
WPG: 8.85
Valuable in formulating high solids lacquers due to low viscosity. Nitrocellulose lacquers for both wood & metal may be formulated with this alkyd.

C.J. OSBORN: Non-Drying Alkyds(Continued):

01-A-1980:
Non-drying alkyd
% Non-Volatile: 49-51
Solvent: Aromatic blend
Viscosity: E-H
Color (Gardner): 5 max.
Acid Number (Solids): 19 max.
Modifying Oil: Non-oxidizing
WPG: 7.75
Properly formulated with MM and/or UF resins, this product makes an excellent wet ink varnish for metal-deco, and roller coat applications. Has excellent color and gloss retention even after processing, adhesion, flexibility and toughness.

01-A-2221:
Non-drying alkyd
% Non-Volatile: 59-61
Solvent: Aromatic hydrocarbon
Viscosity: Z4-Z6
Color (Gardner): 4 max.
Acid Number (Solids): 7 max.
Modifying Oil: Coconut
WPG: 8.60
Baking enamels and quality wood lacquers.

01-A-2373:
Short oil, non-oxidizing color retentive alkyd
% Non-Volatile: 59-61
Solvent: Xylol
Viscosity: Z2-Z4
Color (Gardner): 5 max.
Acid Number (Solids): 10 max.
Modifying Oil: Pelargonic
WPG: 8.71
For quality baking finishes where maximum color and color retention on overbake are required. Also widely used in lacquers.

01-A-2414:
High solid, non-oxidizing alkyd
% Non-Volatile: 59-61
Solvent: Xylol
Viscosity: Z4-Z6
Color (Gardner): 5 max.
Acid Number (Solids): 12 max.
Modifying Oil: Non-oxidizing
WPG: 8.95
This alkyd finds application in lacquer and baking enamel where high solids, color, gloss and hardness are important goals.

C.J. OSBORN: Non-Drying Alkyds(Continued):

01-2525:
Pure non-drying alkyd
% Non-Volatile: 59-61
Solvent: Xylol
Viscosity: Z1-Z3
Color (Gardner): 3 max.
Acid Number (Solids): 12 max.
Modifying Oil: Coconut
WPG: 8.58
Highest quality furniture and wood lacquers. High quality enamels with excellent toughness and gloss when used in alkyd/amino systems.

01-2525-6T:
Pure non-drying alkyd
% Non-volatile: 59-61
Solvent: Toluol
Viscosity: V-X
Color (Gardner): 3 max.
Acid Number (Solids): 12 max.
Modifying Oil: Coconut
WPG: 8.60
Highest quality furniture and wood lacquers. High quality baking enamels with excellent toughness and gloss when used in alkyd/amino systems.

01-2525 EX:
Pure non-drying alkyd
% Non-Volatile: 59-61
Solvent: Exempt
VMP Naphtha
Toluol/Butanol
Viscosity: Z3-Z5
Color (Gardner): 4 max.
Acid Number (Solids): 14 max.
Modifying Oil: Coconut
WPG: 8.50
Highest quality furniture wood lacquers, high quality baking enamels w/excellent toughness and gloss when used in alkyd/amino systems.

C.J. OSBORN: Non-Drying Alkyds(Continued):

01-A-5306:
Non-oxidizing alkyd
% Non-Volatile: 64-66
Solvent: Xylol/Toluol
N-Propanol
Viscosity: X-Z1
Color (Gardner): 6 max.
Acid Number (Solids): 7-13
Modifying Oil: None
WPG: 8.60
Low cost plasticizing resin.

01-A-5704:
Non-drying
% Non-Volatile: 69-71
Solvent: Butyl cello.
Viscosity: Z3-Z5
Color (Gardner): 2 max.
Acid Number (Solids): 10 max.
Modifying Oil: Coconut
WPG: 9.00
High quality furniture and wood lacquers. High quality baking enamel with excellent toughness and gloss when used in alkyd/amino systems.

01-7809:
Non-drying alkyd
% Non-Volatile: 49-51
Solvent: High boiling aromatic solvent
Viscosity: 44-55" #4 Ford cup
Color (Gardner): 5 max.
Acid Number (Solids): 18 max.
Modifying Oil: Coconut
WPG: 7.70
This resin is recommended for roller coat application in metal decorating areas. It is a very good wet ink (vehicle). It will take pasteurization and has excellent adhesion and resistance to dry heat.

01-9589:
Type: Non-drying alkyd
% Non-Volatile: 59-61
Solvent: Xylol
Viscosity: Z1-Z3
Color (Gardner): 3 max.
Acid Number (Solids): 12 max.
Modifying Oil: Coconut
WPG: 8.60
High quality furniture wood lacquers. High quality baking enamels with excellent toughness and gloss when used in alkyd amino systems.

C.J. OSBORN: Resin Modified Alkyds:

Alkyds that vary in oil length and phthalic content and are modified with rosin, hard resins, or phenolics. These modifications improve drying speed, hardness, adhesion, and chemical resistance.

02-101:
Rosin modified phthalic-free alkyd
% Non-Volatile: 49-51
Solvent: VM&P 66/3
MS 66/3
Viscosity: Y-Z1
Color (Gardner): 11 max.
Acid Number (Solids): 45 max.
Modifying Oil: TOFA
WPG: 7.55
Short oil fast drying solution.

02-220:
Short oil phenolic modified alkyd
% Non-Volatile: 49-51
Solvent: Xylol 86%
Amsco C 14%
Viscosity: V-X
Color (Gardner): 10 max.
Acid Number (Solids): 50 max.
Modifying Oil: Linseed
WPG: 8.20
Highest quality enamel finish for machinery, agricultural equipment, automotive, truck bodies.

02-A-1122:
Resin modified alkyd
% Non-Volatile: 40-45
Solvent: MS, VM&P, Dipentene
Viscosity: A-3
Color (Gardner): 12 max.
Acid Number (Solids): N/A
Modifying Oil: Marine
WPG: 7.25
A versatile exterior sealer marine use.
Contains driers ready for use.

C.J. OSBORN: Resin Modified Alkyds(Continued):

02-1589:
Air-dry, modified short oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt VMP Naphtha
Viscosity: Y-Z
Color (Gardner): 11 max.
Acid Number (Solids): 24 max.
Modifying Oil: Tall oil
WPG: 7.50
Excellent for fast dry low cost enamels. Good compatibility with medium and long oil resins. Can be blended to improve drying times of long oil resins.

02-1826:
Phenolic resin modified alkyd
% Non-Volatile: 49-51
Solvent: Xylol, Toluol
Viscosity: X-Y
Color (Gardner): 15 max.
Acid Number (Solids): 15-20
Modifying Oil: Linseed
WPG: 8.40
Very short linseed alkyd with high phenolic modification.

02-1902:
Modified, medium oil alkyd
% Non-Volatile: 59-61
Solvent: Exempt VMP Naphtha
Viscosity: Z2-Z4
Color (Gardner): 12 max.
Acid Number (Solids): 30 max.
Modifying Oil: Linseed
WPG: 8.00
Excellent fast dry non-lifting primer vehicle, outstanding salt and spray resistance with excellent pigment compatibility and stability.

02-2318-35:
Alkyd resin solution
% Non-Volatile: 34-36
Solvent: Xylol, VM&P Naphtha
Viscosity: G-I
Color (Gardner): 4-7
Acid Number (Solids): N/A
Modifying Oil: Linseed
WPG: 7.45
General use spar varnish.
Contains driers ready for use.

C.J. OSBORN: Resin Modified Alkyds(Continued):

02-2369:
Long oil, modified alkyd
% Non-Volatile: 69-71
Solvent: Exempt MS
Viscosity: Z-Z1
Color (Gardner): 14 max.
Acid Number (Solids): 10 max.
Modifying Oil: Selected blend
WPG: 8.00
Excellent porch and deck enamel vehicle, trim & trellis. General purpose maintenance enamels, etc. Good penetration over rusty surfaces.

02-2426:
Modified medium oil alkyd
% Non-Volatile: 49-51
Solvent: Exempt VMP Naphtha
Viscosity: T-V
Color (Gardner): 12 max.
Acid Number (Solids): 40 max.
Modifying Oil: Soya-TOFA
WPG: 7.65
Tough, durable non-lifting primers for adhesion and fast dry.

02-2873:
Modified phenolic resin tung oil varnish
% Non-Volatile: 39-41
Solvent: 93% exempt mineral spirits
7% dipentene
Viscosity: B-D
Color (Gardner): 12 max.
Acid Number (Solids): N/A
Modifying Oil: Tung
WPG: 7.20
Excellent as floor and trim varnish for wood and concrete porches and furniture. Good exterior durability, chemical and salt spray resistance.

02-A-3869:
Phenolic modified alkyd
% Non-Volatile: 49-51
Solvent: Xylol
Viscosity: U-W
Color (Gardner): 10
Acid Number (Solids): 28-32
Modifying Oil: Soya/Linseed/Tung
WPG: 8.32
High quality non-lifting primer vehicle.

C.J. OSBORN: Resin Modified Alkyds(Continued):

02-A-4196:
Resin modified alkyd
% Non-Volatile: 49-51
Solvent: Exempt MS
Viscosity: Z-Z2
Color (Gardner): 11 max.
Acid Number (Solids): 12 max.
Modifying Oil: TOFA
WPG: 7.68
Short oil resin modified alkyd offering a variety of uses.

02-4603:
Universal tinting vehicle
% Non-Volatile: 69-71
Solvent: Xylol
Viscosity: D-G
Color (Gardner): 12 max.
Acid Number (Solids): 32 max.
Modifying Oil: TOFA
WPG: 8.26
This vehicle has been designed for a wide latitude of compatibility in tinting proportions. Low viscosity & super wetting make possible the formulation of high PVC tinting pastes. Useful in trade sale & industrial finishes.

02-A-4773:
Modified medium oil alkyd
% Non-Volatile: 79-81
Solvent: MEK/PM Glycol ether
Viscosity: Z3-Z5
Color (Gardner): 12 max.
Acid Number (Solids): 40 max.
Modifying Oil: Soya/TOFA
WPG: 8.67
Tough, durable non-lifting primers with excellent adhesion and fast dry.

02-A-4963:
Resin modified alkyd
% Non-Volatile: 49-51
Solvent: VM&P 66/3
Isobutyl alcohol
Viscosity: N-P
Color (Gardner): 10 max.
Acid Number (Solids): 28-32
Modifying Oil: Tung oil/linseed
WPG: 7.76
Meets the requirements for MIL 52995 specification.

C.J. OSBORN: Resin Modified Alkyds(Continued):

02-A-5999:
Rosin phenolic modified alkyd
% Non-Volatile: 59-61
Solvent: Xylol
Viscosity: Z-Z2
Color (Gardner): 11 max.
Acid Number (Solids): 18 max.
Modifying Oil: Linseed
WPG: 8.48
Designed for primers and topcoats where adhesion, gloss and speed of drying are of prime importance.

02-A-6411:
Rosin modified, isophthalic acid
% Non-Volatile: 44-46
Solvent: Exempt MS
Viscosity: J-O
Color (Gardner): 10 max.
Acid Number (Solids): 14 max.
Modifying Oil: Linseed/Fish
WPG: 7.42
Dries exceptionally well making possible the formulation of clear pigmented systems. Baking finishes prepared with this resin modified alkyd are significant for their gloss, hardness and wetting properties.

02-A-8187:
Short oil phenolic modified alkyd resin solution in exempt solvent
% Non-Volatile: 49-51
Solvent: 61% Exempt VMP Naphtha
17% Toluol
22% Isopropanol
Viscosity: V-X
Color (Gardner): 9 max.
Acid Number (Solids): 50 max.
Modifying Oil: Linseed
WPG Average: 7.70
This alkyd is a special form of MIRASOL 02-220 designed to meet Rule 66. Kindly refer to the properties of MIRASOL 02-220 for general information as these products are similar except for the products' solvents used.

C.J. OSBORN: Resin Modified Alkyds(Continued):

02-8394:
Modified alkyd for industrial finishes
% Non-Volatile: 59-61
Solvent: Xylol
Viscosity: Z1-Z3
Color (Gardner): 10 max.
Acid Number (Solids): 40 max.
Modifying Oil: Castor
WPG: 8.55
This is used for metal primers and one-coat metal decorating applications over various metal substrates including aluminum. It may also be used as a primer on surfaces of wood.

02-8621:
Modified alkyd resin
% Non-Volatile: 49-51
Solvent: 45% Xylol
35% Exempt VMP Naphtha
20% Exempt MS
Viscosity: Z4-Z6
Color (Gardner): 10 max.
Acid Number (Solids): 14 max.
Modifying Oil: TOFA
WPG: 7.90
Low cost enamels and primers where fast air dry and good adhesion are required.

02-9627:
Modified short oil alkyd
% Non-Volatile: 59-61
Solvent: 50% Xylol
59% Exempt Naphtha
Viscosity: Z2-Z4
Color (Gardner): 16 max.
Acid Number (Solids): 30 max.
Modifying Oil: Marine
WPG: 8.20
Lower cost 02-1902, excellent fast dry primer vehicle. Outstanding salt spray resistance with good pigment capability and stability.

RANBAR TECHNOLOGY INC.: G-1265-M-60 Alkyd Resin:

G-1265-M-60 is a TOFA version of G-4070-M-60 supplied at 60% non-volatile in mineral spirits. It is designed for architectural/industrial primers and enamels that require good brushability, color retention, and durability.

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 52+-1%
- Weight/gallon, 25C: 7.7+-0.1 pounds
- Viscosity, 25C: T-W
- Reduced Viscosity, 25C: A-C
  (50% N.V. in exempt mineral spirits)
- Flash Point (Seta): 104F
- Color, Gardner: 8 maximum
- Appearance: Clear, light amber liquid
- Solvent: Exempt mineral spirits
- Cure: Air dry
- Tack Free Time at 19C: 3-4 hours

Solid Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil type: Tall oil
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.05-0.1% Cobalt
b. 0.1-0.3% Zirconium

RANBAR TECHNOLOGY INC.: G-1265-M-70 Alkyd Resin:

G-1265-M-70 is a long tall oil alkyd supplied at 70% non-volatile in exempt mineral spirits. It is used in enamels and primers requiring good brushability, color retention, and durability.

Solution Properties:
- Non-volatile by weight: 70+-1%
- Non-volatile by volume: 62.5+-1%
- Weight/gallon, 25C: 8.10+-0.1 pounds
- Viscosity, 25C: Z-Z2
- Reduced Viscosity, 25C: C-F
  (50% N.V. in exempt mineral spirits)
- Flash Point (Seta): 104F
- Color, Gardner: 8 maximum
- Appearance: Clear, light amber liquid
- Solvent: Exempt mineral spirits
- Cure: Air dry
- Tack Free Time at 19C: 3-4 hours

Solids Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil type: Tall oil
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.05-0.1% Cobalt
b. 0.1-0.3% Zirconium

RANBAR TECHNOLOGY INC.: G-3629-M-60 Alkyd Resin:

G-3629-M-60 Alkyd Resin conforms to Federal Specification TT-R-266D, Type II, Class B. It is recommended for use in structural steel primers, such as SSPC Paint Specification No. 2, 11, and 25. Because of its good brushing properties and its ability to dry to a high gloss, it also finds use in clear varnishes.

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 51+-1%
- Weight/gallon, 25C: 7.8+-0.1 pounds
- Viscosity, 25C: T-V
- Reduced viscosity, 25C: C-E
  (45% N.V. in mineral spirits)
- Flash Point (Seta): 104F
- Color, Gardner: 8 maximum
- Appearance: Clear, light amber liquid
- Solvent: Exempt mineral spirits
- Cure: Air dry
- Tack free time at 20C: 8 hours

Solids Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil Type: Linseed
- Oil Length: Long
- Acid Value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.05% Cobalt
b. 0.1-0.3% Zirconium
c. 0.03-0.05% Calcium

RANBAR TECHNOLOGY INC.: G-4070-M-60 L/S Alkyd Resin:

G-4070-M-60 L/S Resin conforms to Federal Specification TT-R-266D, Type I, Class B. It is a general purpose resin for interior or exterior use in architectural and trim enamels, structural and machinery paints, and primers.

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 52+-1%
- Weight/gallon, 25C: 7.7+-.10 pounds
- Viscosity, 25C: V-W
- Reduced Viscosity: C-F
  (50% N.V. in mineral spirits)
- Flash Point (Seta): 104F
- Color, Gardner: 8 maximum
- Appearance: Clear, amber liquid
- Solvent: Exempt mineral spirits
- Cure: Air Dry or Bake
- Tack Free Time at 24C:
  - Drier system a. 4-5 1/2 hours
  - Drier system b. 2-3 hours

Solid Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil type: Soya
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.05% Cobalt plus 0.3% Calcium
- b. 0.05% Cobalt plus 0.3% NUXTRA UTD

Vinyl Compatibility:
G-4070-M-60 is compatible with VINYLITE Resin VAGH when tested according to TT-R-266D, paragraph 4.2.13.6.

RANBAR TECHNOLOGY INC.: G-4070-M-70 Alkyd Resin:

G-4070-M-70 Alkyd Resin conforms to Federal Specification TT-R-266D, Type I, Class A. It is a general purpose resin for interior or exterior use in architectural and trim enamels, and structural and machinery primers/enamels.

Solution Properties:
- Non-volatile by weight: 70+-1%
- Non-volatile by volume: 63+-1%
- Weight/gallon, 25C: 8.0 pounds
- Viscosity, 25C: Z-Z2
- Reduced Viscosity: C-F
  (50% N.V. in mineral spirits)
- Flash Point (Seta): 8 maximum
- Appearance: Clear, amber liquid
- Solvent: Exempt mineral spirits
- Cure: Air Dry
- Tack Free Time at 20C: 3-4 hours

Solid Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil type: Soya
- Oil length: Long
- Acid number: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.05-0.08% Cobalt
- b. 0.15-0.20% Calcium
- c. 0.15-2.25% Zirconium

Vinyl Compatibility:
G-4070-M-70HV is compatible with Vinylite Resin VAGH when tested according to TT-R-266D, paragraph 4.2-12.6.

RANBAR TECHNOLOGY INC.: G-4070-M-70HV Alkyd Resin:

G-4070-M-70HV Alkyd Resin is a general purpose resin for use in architectural, structural steel, machinery primers and enamels. Except for its higher, as received and reduced viscosity, it meets all of the requirements of TT-R-266D, Type I, Class A alkyd resin.

Solution Properties:
- Non-volatile by weight: 70+-1%
- Non-volatile by volume: 63+-1%
- Weight/gallon, 25C: 8.0 pounds
- Viscosity, 25C: Z4-Z6
- Reduced Viscosity: E-H
  (50% N.V. in mineral spirits)
- Flash Point (Seta): 104F
- Color, Gardner: 8 maximum
- Appearance: Clear, amber liquid
- Solvent: Exempt mineral spirits
- Cure: Air Dry
- Tack Free Time at 20C: 3-4 hours

Solid Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil type: Soya
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.05-0.08% Cobalt
b. 0.15-0.20% Calcium
c. 0.15-2.25% Zirconium

Vinyl Compatibility:
G-4070-M-70(HV) is compatible with Vinylite Resin VAGH when tested according to TT-R-266D, paragraph 4.2.13.6.

RANBAR TECHNOLOGY INC.: G-4070-X-70 L/S Alkyd Resin:

G-4070-X-70 is a long oil soya alkyd resin which is supplied at 70% non-volatile in xylene. It conforms to the requirements of Federal Specification TT-R-266D, Type I, Class C and is designed for formulating low V.O.C. industrial primers and enamels. Excellent vinyl compatibility.

Solution Properties:
- Non-volatile by weight: 70+-1%
- Non-volatile by volume: 66+-1%
- Weight/gallon, 25C: 8.2+-0.1 pounds
- Viscosity, 25C: U-W
- Reduced Viscosity:
  - 50% N.V. in xylene: A-C
  - 60% N.V. in xylene: F-I
- Flash Point (Seta): 93F
- Color: 8 maximum
- Appearance: Clear, light yellow liquid
- Solvent: Xylene
- Cure: Air Dry
- Tack Free Time at 20C: 2-3 hours (Drier recommendation b)

Solid Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil type: Soya
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.05% Cobalt
- b. 0.1-0.3% Zirconium
- c. 0.03-0.05% Calcium

RANBAR TECHNOLOGY INC.: G-4070-BC-75 L/S Alkyd Resin:

G-4070-BC-75 is a general purpose soya long oil alkyd cut in 2-butoxyethanol. Its uses include architectural and structural steel enamels and primers.

Solution Properties:
- Non-volatile by weight: 75+-1%
- Non-volatile by volume: 72+-1%
- Weight/gallon, 25C: 8.40+-.10 pounds
- Viscosity, 25C: X-Z
- Flash Point (Seta): 140F
- Color: 8 maximum
- Appearance: Amber liquid
- Solvent: Butyl Cellosolve
- Tack Free Time at 20F:
  - Drier system a.: 4-5 1/2 hours
  - Drier system b.: 2-3 hours

Solid Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil type: Soya
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.06% Cobalt
- b. 0.1-0.3% Zirconium
- c. 0.02-0.04% Calcium

RANBAR TECHNOLOGY INC.: G-4495-100 L/T Iso Resin:

G-4495 is an isophthalic modified resin made from tall oil fatty acids. G-4495 may be used in place of linseed oil/bodied linseed oil in house paints or as a modifier for latex paints. Improvements in dry, yellowing, and durability will be seen when G-4495 is used to replace linseed oil.

Solution Properties:
- Non-volatile by weight: 99% minimum
- Non-volatile by volume: 99% minimum
- Weight/gallon, 25C: 8.1+-.1 pounds
- Viscosity, Gardner, 25C: Z2-Z4
- Color, Gardner: 10 maximum

Solid Resin Properties:
- IPA: Present
- Oil type: TOFA
- Oil length: Long
- Acid value: 8 maximum

RANBAR TECHNOLOGY INC.: G-4503-M-75 L/S Iso Resin:

G-4503-M-75 is a long oil alkyd based on soya oil and isophthalic acid. The use of isophthalic acid yields resins of better durability and higher thermal endurance than comparable resins using phthalic anhydride. G-4503-M-75 may be used in air dry or force dry coatings, or, when combined with amino resins, in baking coatings.

Solution Properties:
- Non-volatile by weight: 75+-1%
- Non-volatile by volume: 69+-1%
- Weight/gallon, 25C: 8.1+-.1 pounds
- Viscosity, Gardner: Z-Z2
- Color, Gardner: 8 maximum
- Flash Point, Seta: 104F
- Solvent: Exempt mineral spirits

Solid Resin Properties:
- IPA: Present
- Oil type: Soya
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.06% Cobalt
b. 0.1-0.3% Zirconium
c. 0.02-0.04% Calcium

RANBAR TECHNOLOGY INC.: G-4520-V-50 L/T Resin:

G-4520-V-50 is a long oil alkyd made from distilled tall oil. Thinned with VM&P Naphtha, it can be used where a fast set time is desired. Finished products made with G-4520-V-50 must be able to tolerate the presence of rosin.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 40+-1%
- Weight/gallon, 25C: 7.35+-.10 pounds
- Viscosity, Gardner: Y-Z1
- Color, Gardner: 10 maximum
- Solvent: VM&P Naphtha

Solid Resin Properties:
- Phthalic Anhydride: 17%
- Oil Type: Distilled tall oil
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.06% Cobalt
b. 0.1-0.3% Zirconium

RANBAR TECHNOLOGY INC.: G-4549-100 L/L Alkyd Resin:

G-4549 is a long oil linseed alkyd intended to be used as a latex paint modifier. G-4549 will help achieve maximum adhesion and chalk binding when used in acrylic or PVA latex. The recommended usage range is 5 to 15% on the latex solids.

G-4549 may be used as a replacement for linseed oil/bodied linseed oil in oil type housepaints. Improvement in dry, yellowing, and durability will be seen when replacing linseed oil.

Solution Properties:
- Non-volatile by weight: 99% minimum
- Non-volatile by volume: 99% minimum
- Weight/gallon, 25C: 8.4+-.1 pounds
- Viscosity, Gardner, 25C: X-Z1
- Color, Gardner: 13 maximum

Solid Resin Properties:
- Phthalic Anhydride: 15%
- Oil Type: Linseed
- Oil Length: Long
- Acid Value: 8 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.02-0.04% Cobalt
b. 0.1-0.2% Zirconium

G-4549 is also available with the wetting agent and driers included so that no further additions are necessary. Its composition is as follows:

G-4549 Alkyd	94.46% by weight
Wetting Agent	4.00
6% Manganese drier	0.54
18% Zirconium drier	0.60
Anti-skin agent	0.40

RANBAR TECHNOLOGY INC.: G-4561-X-70 L/LS Alkyd Resin:

G-4561-X-70 is a long oil soya/linseed alkyd resin supplied at 70% non-volatile in xylene. Similar to G-4070-X-70 but with a faster and harder through dry. Used for reduced V.O.C. industrial enamels and primers.

Solution Properties:
- Non-volatile by weight: 70+-1%
- Non-volatile by volume: 66+-1%
- Weight/gallon, 25C: 8.3+-.1 pounds
- Viscosity, 25C: V-K
- Reduced Viscosity, 25C:
  - 60% in Xylene: I-K
- Cure: Air dry or force dry
- Flash Point (Seta): 93F
- Color: 10 maximum
- Solvent: Xylene

Solid Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil type: Soya/linseed
- Oil length: Long
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.05% Cobalt
- b. 0.1-0.3% Zirconium
- c. 0.03-0.05% Calcium

RANBAR TECHNOLOGY INC.: G-4587-100 Linseed-Penta Grinding Vehicle:

G-4587 is a linseed oil pentaerythritol vehicle for grinding pigments. A low acid value makes this vehicle suitable for reactive pigments.

Solution Properties:
- Non-volatile by weight: 99% minimum
- Non-volatile by volume: 99% minimum
- Viscosity, Gardner, 25C: C-E
- Weight/gallon, 25C: 7.90+-.10 pounds
- Color, Gardner: 10 maximum
- Hydroxyl value: 120+-10

Solid Resin Properties:
- Oil type: Linseed
- Oil length: Long

Drier Recommendation (Per cent metal based on resin solids):
- None recommended.

RANBAR TECHNOLOGY INC.: G-4635-M-60 IPA Alkyd Resin:

A high quality IPA long oil soya alkyd supplied at 60% non-volatile in mineral spirits. Recommended for quality interior and exterior house paints, industrial enamels, and maintenance finishes. Good brushing properties along with superior gloss retention and durability when compared to phthalic alkyds.

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 51+-1%
- Weight/gallon, 25C: 7.85+-0.05 pounds
- Viscosity, 25C:
  - at 60% N.V.: Z4-Z6
  - at 50% N.V.: T-W
- Flash Point (Seta): 104F
- Appearance: Clear, amber liquid
- Solvent: Mineral Spirits
- Cure: Air Dry
- Dry time at 23C:
  - set-to-touch: 1 1/2-2 hours
  - cotton free: 3 hours
  - tack free: 4-5 hours
- Color: 8 maximum

Solid Resin Properties:
- IPA: Present
- Oil type: Soya
- Oil length: Long
- Acid value: 13 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.05% Cobalt
b. 0.1-0.3% Zirconium
c. 0.02-0.06% Calcium

RANBAR TECHNOLOGY INC.: G-4688-OMS-60 Alkyd Resin:

G-4688-OMS-60 is a version of G-4070-M-60 supplied at 60% non-volatile in odorless mineral spirits. Used for interior or exterior enamels and primers where odor could be a problem. Except for higher viscosity, it meets all the requirements of TT-R-266D, Type I, Class A.

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 50+-1%
- Weight/gallon, 25C: 7.71+-0.1 pounds
- Viscosity, 25C: Z3-Z5
- Reduced Viscosity: C-F
  (40% N.V. in Odorless Mineral Spirits)
- Flash Point (Seta): 125F
- Color, Gardner: 8 maximum
- Appearance: Clear, amber liquid
- Solvent: Odorless mineral spirits
- Cure: Air dry

Solid Resin Properties:
- Phthalic Anhydride: 23% minimum
- Oil Type: Soya
- Oil Length: Long
- Acid Value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.05% Cobalt
b. 0.1-0.3 Zirconium
c. 0.3-0.05 Calcium

RANBAR TECHNOLOGY INC.: G-4709-100 L/L Alkyd Resin:

G-4709 is a long oil linseed alkyd intended to be used as latex paint modifier. G-4709 will help achieve maximum adhesion and chalk binding when used in acrylic or PVA latex. The recommended usage range is 5 to 15% on the latex solids.

Solution Properties:
- Non-volatile by weight: 99% minimum
- Non-volatile by volume: 99% minimum
- Weight/gallon, 25C: 8.6+-0.1 pounds
- Viscosity, Gardner, 25C: W-Z
- Color: 13 maximum

Solid Resin Properties:
- Phthalic Anhydride: 14% minimum
- Oil Type: Linseed
- Oil Length: Long
- Acid Value: 8-14 maximum

G-4709 may be used as a replacement for linseed oil/bodied linseed oil in oil type house paints. Improvement in dry, yellowing, and durability will be seen when replacing linseed oil

RANBAR TECHNOLOGY INC.: G-4067-M-50 M/LS Resin:

G-4067-M-50 M/LS Resin conforms to Federal Specification TTR-266D, Type III. It produces durable interior or exterior coatings, providing easy brushing, high gloss, and excellent weather resistance. It is suitable for air dry, force dry, or baked coatings.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 41+-1%
- Weight/gallon, 25C: 7.60+-.10 pounds
- Viscosity, 25C: X-Z
- Reduced Viscosity, 25C: E-H
  (40% N.V. in mineral spirits)
- Flash Point (Seta): 104F
- Color: 10 maximum
- Solvent: Exempt Mineral Spirits

Solid Resin Properties:
- Phthalic Anhydride: 30%
- Oil type: Soya/Linseed
- Oil length: Medium
- Acid value: 12 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.01-0.03% Cobalt
b. 0.15-0.30% Zirconium
c. 0.02-0.04% Calcium

RANBAR TECHNOLOGY INC.: G-4412-M-50 M/S Alkyd Resin:

An economical medium soya alkyd resin supplied at 50% non-volatile in mineral spirits. It is designed for air dry interior/exterior trade sales enamels, industrial primers and enamels, and maintenance paints. This product can be cured with U-F or melamine resins with excellent results.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 41+-1%
- Weight/gallon, 25C: 7.6+-0.1 pounds
- Viscosity, 25C: Z-Z2
- Reduced viscosity, 25C:
  - (40% N.V. in exempt mineral spirits): I-K
- Flash Point (Seta): 104F
- Color (Gardner 1933): 8 maximum
- Appearance: Clear, light yellow liquid
- Tack Free Time at 19C:
  - Drier Recommendation a.: 4-5 hours
  - Drier Recommendation b.: 5-6 hours
- Solvent: Exempt Mineral Spirits

Solid Resin Properties:
- Phthalic Anhydride: 35% minimum
- Oil type: Soya
- Oil length: Medium
- Acid value: 10 maximum

Drier Recommenadion (Per cent metal based on resin solids):
- a. 0.03-0.05% Cobalt
- b. 0.2-0.4% Zirconium
- c. 0.03-0.05% Calcium

RANBAR TECHNOLOGY INC.: G-4412-M-50HV Alkyd Resin:

G-4412-M-50HV is a medium oil alkyd resin for interior or exterior use. It is suitable for air drying or baking coatings.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 40.5+-1%
- Weight/gallon, 25C: 7.60+-.05 pounds
- Viscosity, 25C: Z5-Z6
- Reduced Viscosity, 25C: U-W
  (40% N.V. in mineral spirits)
- Flash Point (Seta): 104F
- Color (Gardner): 8 maximum
- Appearance: Clear, amber liquid
- Solvent: Exempt Mineral Spirits
- Cure: Air Dry or Bake

Solid Resin Properties:
- Phthalic Anhydride: 35% minimum
- Oil type: Soya
- Oil length: Medium
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.05% Cobalt
b. 0.2-0.4% Zirconium
c. 0.03-0.05% Calcium

RANBAR TECHNOLOGY INC.: G-4412-V-50 Alkyd Resin:

G-4412-V-50 is a medium oil alkyd resin for interior or exterior use. It is suitable for air drying or baking coatings.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 40.5+-1%
- Weight/gallon, 25C: 7.45+-0.1 pounds
- Viscosity, 25C: Z1-Z3
- Reduced Viscosity: F-J
  (40% N.V. in VM&P Naphtha)
- Flash Point, Seta: 55F
- Color, Gardner: 9 maximum
- Appearance: Clear, amber liquid
- Solvent: Exempt VM&P Naphtha
- Cure: Air Dry or Bake

Solid Resin Properties:
- Phthalic Anhydride: 35% minimum
- Oil type: Soya
- Oil length: Medium
- Acid length: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.05% Cobalt
b. 0.2-0.4% Zirconium
c. 0.03-0.05% Calcium

RANBAR TECHNOLOGY INC.: G-4525-M-50 M/L Alkyd Resin:

G-4525-M-50 is a medium oil alkyd resin recommended for primers and exterior enamels. Exhibits good through dry and good exterior durability.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 41+-1%
- Weight/gallon, 25C: 7.6 pounds
- Viscosity, 25C: Z1-Z2
- Reduced Viscosity: E-H
  (40% N.V. in exempt mineral spirits)
- Flash Point (Seta): 104F
- Color, Gardner: 10 maximum
- Solvent: Exempt mineral spirits

Solid Resin Properties:
- Phthalic Anhydride: 30% minimum
- Oil type: Linseed
- Oil length: Medium
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.06% Cobalt
- b. 0.2-0.4% Zirconium
- c. 0.3-0.05% Calcium

RANBAR TECHNOLOGY INC.: G-4706-M-50 Medium Oil Alkyd Resin:

G-4706-M-50 is a medium oil alkyd resin based on a mixture of soya and linseed oils. It is designed as a corrosion resistant vehicle for metal primers and enamels.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 41+-1%
- Weight/gallon, 25C: 7.6+-0.1 pounds
- Viscosity, Gardner: X-Z
- Reduced Viscosity: F-I
  (40% N.V. in exempt mineral spirits)
- Color, Gardner: 8 maximum
- Flash Point (Seta): 104F
- Solvent: Exempt mineral spirits

Solid Resin Properties:
- Phthalic Anhydride: 30% minimum
- Oil type: Soya/linseed
- Oil length: Medium
- Acid value: 12 maximum

Drier Recommendations (Per cent metal based on resin solids):
- a. 0.01-0.03% Cobalt
- b. 0.15-0.30% Zirconium
- c. 0.02-0.04% Calcium

RANBAR TECHNOLOGY INC.: G-4401-B-70 High Solids, Short Oil Alkyd:

G-4401-B-70 High Solids, Short Oil Alkyd is recommended for air dry coatings or baking coatings when used in combination with amino resins. G-4401-B-70 is supported at 70% non-volatile to give the formulation greater latitude in the choice of solvents to meet air quality regulations.

Solution Properties:
- Non-volatile by weight: 70+-1%
- Non-volatile by volume: 62.2+-1%
- Weight/gallon, 25C: 8.60+-.10 pounds
- Viscosity, 25C: Z-Z2
- Flash Point (Seta): 85F
- Color, Gardner: 8 maximum
- Appearance: Free of haze
- Solvent: 70:30 n-Butanol; ethyl benzene

Solid Resin Properties:
- Phthalic Anhydride: 40% minimum
- Oil type: Soya
- Oil length: Short
- Acid value: 12 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.04-0.06% Cobalt
b. 0.03-0.05% Calcium
c. 0.20-0.4% Zirconium

RANBAR TECHNOLOGY INC.: G-4451-X-50 S/T Resin:

G-4451-X-50 is a short oil alkyd based on low rosin tall oil fatty acids. It is intended to be used with melamine or urea-formaldehyde resins to formulate baking enamels for interior use. 20-30% amino resin is the range suggested as a starting point.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 43+-1%
- Weight/gallon, 25C: 8.25+-.10 pounds
- Viscosity (Gardner): Z-Z2
- Reduced Viscosity: H-J
  (40% N.V. in Xylene)
- Color: 6 maximum
- Flash Point (Seta): 80F
- Solvent: Xylene

Solid Resin Properties:
- Phthalic Anhydride: 40% minimum
- Oil type: TOFA
- Oil length: Short
- Acid value: 8 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.05% Cobalt - for air dry systems
b. 0.2-0.4% Zirconium - for air dry systems

RANBAR TECHNOLOGY INC.: G-4451-X-50HV Alkyd Resin-High Viscosity:

G-4451-X-50HV is a "high drink", short tall oil alkyd resin. It is recommended for use in moderately priced and industrial baking enamels and primers. It can also be used in air dry coatings.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 41+-1%
- Weight/gallon, 25C: 8.3 pounds
- Viscosity, 25C: Z2-Z4
- Reduced viscosity, 25C: L-N (40% N.V. in xylene)
- Flash Point (Seta): 80F
- Solvent: Xylene
- Color: 6 maximum
- Appearance: Clear, light yellow liquid

Solid Resin Properties:
- Phthalic Anhydride: 40% minimum
- Oil type: TOFA
- Oil length: Short
- Acid value: 8 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.05% Cobalt - for air dry systems
b. 0.2-0.4% Zirconium - for air dry systems

RANBAR TECHNOLOGY INC.: G-4451-VBT-50 Resin:

G-4451-VBT-50 is a short oil alkyd based on low rosin tall oil fatty acids. It is intended to be used with melamine or urea-formaldehyde resins to formulate baking enamels for interior use. The range suggested as a starting point is 20-30% amino resin. The blended solvent replaces xylene and allows the coating formulator to create "exempt" solvent systems.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 39+-1%
- Weight/gallon, 25C: 7.85+-.10 pounds
- Viscosity at 25C: Z1-Z3
- Reduced viscosity at 25C: I-J (40% N.V.)
- Flash Point (Seta): 50F
- Color, Gardner: 6 maximum
- Solvent: V/B/T: VM&P Naphtha/n-Butanol/Toluene

Solid Resin Properties:
- Phthalic Anhydride: 40% minimum
- Oil type: TOFA
- Oil length: Short
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.05% Cobalt - for air dry systems
b. 0.2-0.4% Zirconium - for air dry systems

RANBAR TECHNOLOGY INC.: G-4664-T-60 Traffic Paint Vehicle:

G-4664-T-60 is a fast setting short oil alkyd resin based on tall oil. It is recommended for use in traffic paints and industrial enamels and primers.

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 51+-1%
- Weight/gallon, 25C: 8.8+-1 pound
- Viscosity, 25C: Z4-Z6
- Reduced Viscosity, 25C: C-D
  (40% N.V. in toluene)
- Flash Point (Seta): 45F
- Solvent: Toluene
- Color, Gardner 1933: 9 maximum
- Appearance: Clear, light yellow liquid

Solid Resin Properties:
- Phthalic Anhydride: 12% minimum
- Oil content: 33% minimum
- Oil type: TOFA
- Oil length: Short
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.05% Cobalt
- b. 0.2-0.4% Zirconium

RANBAR TECHNOLOGY INC.: G-4686-PMA-90 High Solids, Short Oil Alkyd Resin:

G-4686-PMA-90 is a high solids short oil alkyd resin based on tall oil. It is recommended for high solids industrial baking enamels and primers.

Solution Properties:
- Non-volatile by weight: 90+-2%
- Non-volatile by volume: 88+-2%
- Weight/gallon, 25C: 9.0+-0.1 pounds
- Viscosity, 25C: Z4-Z6
- Reduced Viscosity, 25C: L
  (70% N.V. in Xylene)
- Flash Point (Seta): 90F
- Color: 7 maximum
- Solvent: PM Acetate/Xylene

Solid Resin Properties:
- Phthalic Anhydride: 28% minimum
- Oil type: TOFA
- Oil length: Short
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- None recommended.

RANBAR TECHNOLOGY INC.: G-4702-X-50 Chain Stopped Alkyd Resin:

G-4702-X-50 is a chain stopped short oil alkyd resin based on low rosin, tall oil fatty acids. This resin gives rapid set and tack free times in air dry systems.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 42+-1%
- Weight/gallon, 25C: 8.5+-0.1 pounds
- Viscosity (Gardner): X-Z
- Reduced Viscosity (40% N.V. in Xylene): F-J
- Flash Point (Seta): 80F
- Color (Gardner): 6 maximum
- Solvent: Xylene

Solid Resin Properties:
- Phthalic Anhydride: 39%
- Oil type: TOFA
- Oil length: Short
- Acid value: 12 maximum

Drier Recommendations:
- a. 0.03-0.06% Cobalt
- b. 0.2-0.3% Zirconium

RANBAR TECHNOLOGY INC.: G-1488E VT/Oil Copolymer Resin:

G-1488E is a vinyltoluene/oil copolymer resin supplied at 60% non-volatile in VM&P Naphtha. The resin is used in the manufacture of fast air drying machinery enamels and primers. The products made with this resin dry primarily by evaporation of solvent from the applied coating's surface. To improve the mar resistance of the coating, approximately 10% melamine resin is added and cured for 20 minutes at 250F (121C).

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 50+-1%
- Weight/gallon, 25C: 7.65+-.10 pounds
- Viscosity, Gardner, 25C: Z-Z2
- Reduced Viscosity, 25C (40% in exempt VM&P Naphtha): D-F
- Flash Point (Seta): 52F
- Color, Gardner: 6 maximum
- Solvent: VM&P Naphtha

Solid Resin Properties:
- Oil type: Linseed
- Modifier: Vinyltoluene

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.02-0.04% Cobalt

RANBAR TECHNOLOGY INC.: G-1515E VT/Oil Copolymer Resin:

G-1515E is a vinyltoluene/oil copolymer resin supplied at 60% non-volatile in mineral spirits. The resin is used in air dry enamels, machinery enamels, floor sealers, primers, and surfacers. To improve mar resistance of coatings formulated with G-1515E, add 10% of a melamine resin and cure for 10-20 minutes at 250F (121C).

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 53.5+-1%
- Weight/gallon, 25C: 7.45+-0.1 pounds
- Viscosity, 25C: X-Y
- Reduced Viscosity, 25C: H-I (40% N.V. in exempt mineral spirits)
- Flash Point (Seta): 104F
- Appearance: Clear, light yellow liquid
- Solvent: Exempt mineral spirits
- Cure: Solvent evaporation
- Color: 6 maximum
- Tack free time at 19C: 35-45 minutes

Solid Resin Properties:
- Oil type: Linseed
- Modifier: Vinyltoluene

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.02-0.04% Cobalt

RANBAR TECHNOLOGY INC.: G-4699-V-50 VT Alkyd Copolymer Resin:

G-4699-V-50 is a vinyltoluene/alkyd copolymer resin supplied at 50% non-volatile in an exempt solvent system. It exhibits good toughness, hardness, gloss retention and water resistance. Recommended uses for this resin are as follows:

- Fast dry enamel
- Aerosol paints
- Industrial primers and enamels
- Clear wood sealer/finish

Solution Properties:

- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 41+-1%
- Weight/gallon, 25C: 7.4 pounds
- Viscosity, 25C: Z-Z1
- Reduced Viscosity, 25C: N-P (40% N.V. exempt VM&P Naphtha)
- Color (Gardner 1933): 7 maximum
- Flash Point (Seta): 56F
- Solvent: Rule 66 VM&P/Mineral Spirits blend
- Appearance: Light yellow liquid
- Dry Time at 22C (with recommended drier; see below):
  - set-to-touch: 5-7 minutes
  - cotton free: 10-12 minutes
  - tack free: 25-30 minutes

Solid Resin Properties:

- Oil Type: Linseed

Drier Recommendation (Per cent metal based on resin solids):

- 0.03% Cobalt and 0.15% Calcium

RANBAR TECHNOLOGY INC.: G-4594-OMS-35 Flat Wall Alkyd:

G-4594-OMS-35 is a high viscosity, low solids alkyd intended for odorless flat paints, primer sealers, and undercoat finishes. G-4594-OMS-35 meets the requirements of Rule 66.

Solution Properties:
- Non-volatile by weight: 35+-1%
- Non-volatile by volume: 26.1+-1%
- Viscosity, Gardner, 25C: Z3-Z6
- Weight/gallon, 25C: 7.10+-0.1 pounds
- Color: 7 maximum
- Solvent: Odorless mineral spirits

Solid Resin Properties:
- Phthalic Anhydride: 32% minimum
- Oil type: Low Rosin TOFA
- Oil length: Medium
- Acid value: 10 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.05% Cobalt
- b. 0.1-0.2% Zirconium

RANBAR TECHNOLOGY INC.: G-4617-M-35 Flat Wall Alkyd:

G-4617-M-35 is a high viscosity rosin modified alkyd supplied at 35% non-volatile in mineral spirits. It is intended for use in interior flat paints, primer-sealers, and undercoat finishes.

Solution Properties:
- Non-volatile by weight: 35+-1%
- Non-volatile by volume: 28+-1%
- Weight/gallon, 25C: 7.3+-0.1 pounds
- Reduced Viscosity, 25C: E-G
  (25% N.V. in exempt mineral spirits)
- Flash Point (Seta): 104F
- Appearance: Clear, light amber liquid
- Color: 10 maximum
- Solvent: Exempt mineral spirits

Solids Resin Properties:
- Phthalic Anhydride: 32% minimum
- Oil type: Tall oil fatty acid
- Oil length: Medium
- Acid value: 13 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.05% Cobalt
- b. 0.1-0.2% Zirconium

RANBAR TECHNOLOGY INC.: G-4689-HM-30 Flat Wall Alkyd:

G-4689-HM-30 is a flat wall alkyd resin supplied at 30% non-volatile in a high flash point mineral spirits. Its uses include flat wall paints, sealers, and interior undercoats.

Solution Properties:
- Non-volatile by weight: 30+-1%
- Non-volatile by volume: 23+-1%
- Weight/gallon, 25C: 7.1+-0.1 pounds
- Viscosity, 25C: X-Y
- Flash Point (Seta): 140F
- Appearance: Clear, light amber liquid
- Color: 10 maximum
- Solvent: High Flash Mineral Spirits

Solid Resin Properties:
- Phthalic anhydride: 32% minimum
- Type of oil: Tall Oil Fatty Acids
- Oil length: Medium
- Acid value: 13 maximum

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.02-0.04% Cobalt
- b. 0.1-0.2% Zirconium

RANBAR TECHNOLOGY INC.: G-4489-M-60 L/S Silicone Modified Resin:

G-4489-M-60 is a silicone modified, long oil soya alkyd intended for use in durable exterior coatings. Air drying enamels made with G-4489-M-60 are weather resistant, retain their color and gloss, and have good flexibility. Examples of items to be coated include machinery, freight cars, metal drums, signs, railings, metal doors and siding, and metal structures. G-4489-M-60 may be used to make TT-E-490E enamels.

Solution Properties:
- Non-volatile by weight: 60+-1%
- Non-volatile by volume: 52+-1%
- Weight/gallon, 25C: 7.94+-.10 pounds
- Viscosity, 25C: X-Z
- Color, Gardner: 8 maximum
- Flash Point (Seta): 105F
- Solvents: Exempt Mineral Spirits
- V.O.C.: 3.18 lbs./gallon

Solid Resin Properties:
- Phthalic Anhydride: 21%
- Oil type: Soya
- Oil length: Long
- Acid value: 10 maximum
- Modifier: Silicone

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.06% Cobalt
- b. 0.1-0.2% Zirconium

RANBAR TECHNOLOGY INC.: G-4640-X-50 Phenolic Rosin Modified Alkyd:

G-4640-X-50 is a short oil, phenolic-rosin modified alkyd resin supplied at 50% non-volatile in xylene. A rapid setting resin for use in industrial primers and enamels. Can be used in the following government specification finishes: TT-P-664C, TT-E-515A, and MIL-E-15090C, Type II.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 43+-1%
- Weight/gallon, 25C: 8.3 pounds
- Viscosity, 25C:
  - at 50% N.V.: X-Z
  - at 40% N.V.: H-J
- Flash Point (Seta): 80 Deg F
- Color: 12 maximum
- Solvent: Xylene
- Appearance: Clear, dark amber liquid
- Dry Time at 25C (clear film):
  - Set-to-touch: 10 minutes
  - Tack free: 8-10 hours

Solid Resin Properties:
- Phthalic Anhydride: 40% minimum
- Oil type: Linseed/tung
- Oil length: Short
- Modifiers: Phenolic resin; rosin
- Acid number: 33 maximum

Drier Recommendation (Per cent metal based on resin solids):
a. 0.04-0.08% Cobalt
b. 0.1-0.3% Zirconium

Film Properties#:
- Adhesion to Steel: Excellent (crosscut adhesion test)
- Knife Test (Method 6304, Fed. Std. 141B): Pass
- Water immersion at room temperature:
  - after 90 minutes (1 1/2 hrs.): No effect
  - after 180 minutes (3 hours): Slight softening and whitening
  - after 8 hours: Softening and whitening increased; no blisters; no ufc
- Gasoline Resistance at room temperature:
  - after 30 minutes: No effect
  - after 90 minutes: Slight surface wrinkling; film has softened
- Humidity Resistance:
  - 100% R.H. at 65 Deg C for 12 days: Few scattered blisters; no ufc

MIL-E-15090C, Type II, Class 2; semi-gloss gray enamel;
Cure: 7 days at room temperature
Substrate: Steel Q-Panel
Dry film thickness: 1.0 mil

RANBAR TECHNOLOGY INC.: G-4653-V-50 Rosin Modified Alkyd:

G-4653-V-50 is a fast drying rosin modified alkyd supplied at 50% non-volatile in VM&P Naphtha. This resin can be used for fast drying, low cost enamels and primers.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 40+-1%
- Weight/gallon, 25C: 7.45 pounds
- Viscosity, 25C: Z1-Z2
  (40% N.V.): 1
- Flash Point (Seta): 56F
- Color: 10 maximum
- Solvent: Exempt VM&P Naphtha

Solid Resin Properties:
- Phthalic Anhydride: Present
- Oil type: TOFA
- Oil length: Medium
- Acid value: 17 maximum
- Rosin: Present

Drier Recommendation (Per cent metal based on resin solids):
a. 0.03-0.08% Cobalt
b. 0.1-0.2% Zirconium

Film Properties (1):
- Pencil Hardness: 2B
- Adhesion to steel: Excellent
  (crosscut adhesion test)
- Flexibility (one inch mandrel): Fail
- Water immersion: No softening; slight loss in gloss
  (24 hours at room temperature)
- Gasoline resistance, 30 minutes: Slight softening
- Humidity Test, 100 hours: No softening or rust staining; slight surface wrinkle.

(1) Test coating: White enamel; pigment/binder ratio of 50/50 by weight.
Cured 7 days at room temperature.
Dry film thickness--2.5-3.0 mils.

RANBAR TECHNOLOGY INC.: G-4696-M-50 Rosin Modified Alkyd:

G-4696-M-50 is a fast drying rosin modified alkyd supplied at 50% non-volatile in mineral spirits. Its use includes interior architectural primers/sealers, and low cost general purpose primers and enamels.

Solution Properties:
- Non-volatile by weight: 50+-1%
- Non-volatile by volume: 40+-1%
- Weight/gallon, 25C: 7.57+-.1 pounds
- Viscosity, 25C: Z3-Z4
- Flash Point (Seta): 105F
- Solvent: Exempt Mineral Spirits
- Appearance: Clear, dark amber liquid
- Color (Gardner 1933): 10 maximum

Solid Resin Properties:
- Phthalic Anhydride: Present
- Oil type: TOFA
- Oil length: Medium
- Acid value: 17 maximum
- Rosin: Present

Drier Recommendation (Per cent metal based on resin solids):
- a. 0.03-0.08% Cobalt
- b. 0.1-0.2% Zirconium

Film Properties: (1)
- Pencil Hardness: 2B
- Adhesion to steel: Excellent (crosscut adhesion test)
- Flexibility (one inch mandrel): Fail
- Water immersion: No softening; slight loss in gloss (24 hours at room temperature)
- Gasoline resistance, 30 minutes: Slight softening
- Humidity Test, 100 hours: No softening or rust staining; slight surface wrinkle

(1) Test coating: White enamel; pigment/binder ratio of 50/50 by weight.
Cured 7 days at room temperature.
Dry film thickness--2.5-3.0 mils.

THIBAUT & WALKER: Alkyd Resins:

SUPER ALKYD Short Oil Semi-Oxidizing:

501-50XV:
NV %: 50
Solvent: Xylol/VMP
Viscosity (G-H): Z5-Z7
Reduced Visc.: T-V
Visc. % NV Reducer: 40 Xylol
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 40
Type Oil: TOFA
Average Wt./Gal.: 8.30
High drink, color retentive baking vehicle.

533-50XV:
NV %: 50
Solvent: Xylol/VMP
Viscosity (G-H): Z5-Z6+
Reduced Visc.: S-U
Visc. % NV Reducer: 40 Xylol
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 40
Type Oil: TOFA
Average Wt./Gal.: 8.25
Standard quality baking finishes.

537-50X:
NV %: 50
Solvent: Xylol
Viscosity (G-H): Z-Z2
Reduced Visc.: I-K
Visc. % NV Reducer: 40 Xylol
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 40
Type Oil: TOFA
Average Wt./Gal.: 8.30
Medium viscosity baking alkyd, all xylol version of 501-50XV.

543-45G:
NV %: 45
Solvent: SOL G
Viscosity (G-H): Y-Z
Reduced Visc.: Q-T
Visc. % NV Reducer: 40 SOL G
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 40
Type Oil: Soya
Average Wt./Gal.: 8.55
A short oil vehicle in slow solvent especially adaptable for roller coating or similar applications.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Short Oil Semi-Oxidizing(Continued):

545-50X:
NV %: 50
Solvent: Xylol
Viscosity (G-H): N-P
Reduced Visc.: D-G
Visc. % NV Reducer: 45 Xylol
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 40
Type Oil: TOFA
Average Wt./Gal.: 8.20
A universal grinding vehicle with excellent low temperature baking properties. Low viscosity for ease of handling.

547-50X:
NV %: 50
Solvent: Xylol
Viscosity (G-H): W-Y
Reduced Visc.: C-E
Visc % NV Reducer: 40 Xylol
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 40
Type Oil: TOFA
Average Wt./Gal.: 8.25
Medium viscosity for low temperature baking and/or electrostatic spray.

564-60T:
NV %: 60
Solvent: Toluol
Viscosity (G-H): Z5-Z6
Reduced Visc.: C-F
Visc. % NV Reducer: 40 Toluol
Acid Value (Solids) (Max.): 15
Color (Max.): 6
% PA (Min.): 40
Type Oil: Soya
Average Wt./Gal.: 8.65
Very fast air dry, designed for hot line traffic paints.

564-50T:
NV %: 50
Solvent: Toluol
Viscosity (G-H): X-Z
Reduced Visc.: F-H
Visc. % NV Reducer: 40 Toluol
Acid Value (Solids) (Max.): 15
Color (Max.): 6
% PA (Min.): 40
Type Oil: Soya
Average Wt./Gal.: 8.20
Lower solids version of 564-60T for ease of handling.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Short Oil Semi-Oxidizing(Continued):

616-60T:
NV %: 60
Solvent: Toluol
Viscosity (G-H): Z5-Z6
Reduced Visc.: D-G
Visc. % NV Reducer: 40 Toluol
Acid Value (Solids) (Max.): 15
Color (Max.): 6
% PA (Min.): 40
Type Oil: TOFA
Average Wt./Gal.: 8.65
TOFA version of 564-60T

620-60T:
NV %: 60
Solvent: Toluol
Viscosity (G-H): Z2-Z4
Reduced Visc.: A-C
Visc. % NV Reducer: 40 Toluol
Acid Value (Solids) (Max.): 15
Color (Max.): 6
% PA (Min.): 40
Type Oil: TOFA
Average Wt./Gal.: 8.65
Lower viscosity version of 616-60T with equal air dry & cure properties.

SUPER ALKYD Medium Oil:

400-43LO:
NV %: 43
Solvent: Low Odor MS
Viscosity (G-H): X-Y
Reduced Visc.: H-J
Visc. % NV Reducer: 37 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 34
Type Oil: Soya
Average Wt./Gal.: 7.50
A high drink medium oil alkyd in low odor Mineral Spirits with low solids for ease of handling.

400-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): Z4-Z5
Reduced Visc.: R-T
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 34
Type Oil: Soya
Average Wt./Gal.: 7.60
High viscosity medium oil alkyd-improved performance/economy.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Medium Oil(Continued):

402-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): X-Z
Reduced Visc.: E-G
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 30
Type Oil: Soya/Linseed
Average Wt./Gal.: 7.60
An all purpose linseed/soya medium alkyd. Meets requirements for TT-R-266D, Type III.

407-55M:
NV %: 55
Solvent: MS
Viscosity (G-H): Y-Z1
Reduced Visc.: U-W
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 26
Type Oil: Soya
Average Wt./Gal.: 7.65
An all purpose and marine paint alkyd.

415-50MO:
NV %: 50
Solvent: OMS
Viscosity (G-H): Z1-Z3
Reduced Visc.: I-L
Visc. % NV Reducer: 40 OMS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 26
Type Oil: Soya
Average Wt/Gal.: 7.55
General purpose odorless medium oil alkyd.

440-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): X-Z
Reduced Visc.: E-G
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 30
Type Oil: Soya
Average Wt./Gal.: 7.60
All soya version of 402-50M. Meets requirements for TT-R-266D, Type IV.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Medium Oil(Continued):

449-50V:
NV %: 50
Solvent: VMP
Viscosity (G-H): N-P
Reduced Visc.: C-E
Visc. % NV Reducer: 45 VMP
Acid Value (Solids) (Max.): 8
Color (Max.): 7
% PA (Min.): 33
Type Oil: Soya
Average Wt./Gal.: 7.55
Traffic paints and drum enamels.

449-60V:
NV %: 60
Solvent: VMP
Viscosity (G-H): Z3-Z5
Reduced Visc.: D-G
Visc. % NV Reducer: 45 VMP
Acid Value (Solids) (Max.): 8
% PA (Min.): 33
Type Oil: Soya
Average Wt./Gal.: 7.75
Traffic paints and drum enamels. Meets NJ DOT Type 4 spec.

451-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): X-Z
Reduced Visc.: C-E
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 30
Type Oil: TOFA
Average Wt/Gal: 7.60
TOFA version of 440-50M. Meets requirements for TT-R-266D, Type VI.

465-50M:
NV %: 50
Solvent: MS/Xylol
Viscosity (G-H): Z4-Z5
Reduced Visc.: H min.
Visc. % NV Reducer: 35 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 36
Type Oil: TOFA
Average Wt./Gal.: 7.65
High drink, general purpose TOFA medium alkyd. TOFA version of 489-50M.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Medium Oil(Continued):

473-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): Z1-Z3
Reduced Visc.: H-K
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 34
Type Oil: Soya
Average Wt./Gal.: 7.70
Higher viscosity version of 440-50M.

477-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): Z4-Z5
Reduced Visc.: G-J
Visc. % Reducer: 35 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 35
Type Oil: TOFA
Average Wt./Gal.: 7.65
TOFA version of 400-50M.

478-50MO:
NV %: 50
Solvent: OMS
Viscosity (G-H): Z1-Z3
Reduced Visc.: H-K
Visc. % NV Reducer: 40 OMS
Acid Value (Solids)(Max.): 10
Color (Max.): 6
% PA (Min.): 26
Type Oil: TOFA
Average Wt./Gal.: 7.50
TOFA version of 415-50MO.

489-50M:
NV %: 50
Solvent: MS/Xylol
Viscosity (G-H): Z4-Z6
Reduced Visc.: H-K
Visc. % NV Reducer: 35 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 33
Type Oil: Soya
Average Wt./Gal.: 7.65
Higher viscosity of 400-50M.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Medium Oil(Continued):

492-45M:
NV %: 45
Solvent: MS
Viscosity (G-H): C-F
Acid Value (Solids)(Max.): 7
Color (Max.): 6
% PA (Min.): 31
Type Oil: Soya
Average Wt./Gal.: 7.40
Medium oil alkyd that with driers added meets requirements for TT-V-109C, Interior Alkyd Resin Varnish.

493-50V:
NV %: 50
Solvent: VMP
Viscosity (G-H): X-Z
Reduced Visc.: E-H
Visc. % NV Reducer: 40 VMP
Acid Value (Solids) (Max): 10
Color (Max.): 6
% PA (Min.): 30
Type Oil: Soya/Linseed
Average Wt./Gal.: 7.55
Traffic vehicle, fast drying version of T & W 402-50M.

494-55M:
NV %: 55
Solvent: Blend
Viscosity (G-H): Z3-Z5
Reduced Visc.: S-V
Visc. % NV Reducer: 45 MS
Acid Value (Solids) (Max.): 10-13
Color (Max.): 6
% PA (Min.): IPA Present
Type Oil: Mixed Drying
Average Wt./Gal.: 7.75
Medium-long oil designed to accept large amounts of water, up to 20% or more by volume in paints.

496-43M:
NV %: 43
Solvent: MS
Viscosity (G-H): U-X
Reduced Visc.: G-I
Visc. % NV Reducer: 36.5 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 5
% PA (Min.): 32
Type Oil: Soya
Average Wt./Gal.: 7.35
Similar to 400-50M but with greater compatibility and at lower solids for ease of handling.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Medium Oil(Continued):

604-50V:
NV %: 50
Solvent: VMP
Viscosity (G-H): Z1-Z3
Reduced Visc.: G-J
Visc. % NV Reducer: 40 VMP
Acid Value (Solids) (Max.): 10
Color (Max.): 8
% PA (Min.): 33
Type Oil: Soya
Average Wt./Gal.: 7.60
High viscosity, medium oil for use in traffic paints and drum enamels.

605-60T:
NV %: 60
Solvent: Toluol
Viscosity (G-H): D-H
Acid Value (Solids) (Max.): 8
Color (Max.): 6
% PA (Min.): 30
Type Oil: Soya
Average Wt./Gal.: 8.30
Fast dry traffic paints. Meets NJ DOT Type 3A.

615-45V:
NV %: 45
Solvent: VMP
Viscosity (G-H): Z1-Z3
Reduced Visc.: R-U
Visc. % NV Reducer: 40 VMP
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 34
Type Oil: Soya
Average Wt./Gal.: 7.45
Fast dry traffic paints, primers, enamels and structural steel coatings.

618-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): W-Y
Reduced Visc.: E-G
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): IPA Present
Type Oil: Mixed Drying
Average Wt./Gal.: 7.60
A mixed drying oil, containing IPA for improved flexibility.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Long Oil:

300-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): U-W
Reduced Visc.: C-F
Visc. NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Soya
Average Wt./Gal.: 7.75
Long oil soya. Meets requirements for TT-R-266D, Type I, Class B.

300-70M:
NV %: 70
Solvent: MS
Viscosity (G-H): Z1-Z3
Reduced Visc.: C-F
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Soya
Average Wt./Gal.: 7.95
Long oil soya. Meets requirements for TT-R-266D, Type I, Class A.

303-50MD:
NV %: 50
Solvent: MS
Viscosity (G-H): H-J
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 20
Type Oil: Soya
Average Wt./Gal.: 7.50
Alkyd varnish suitable for all interior and exterior trim work as well as floor and decks. Contains driers.

305-70M:
NV %: 70
Solvent: MS
Viscosity (G-H): Y-Z1
Reduced Visc.: C-F
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Soya
Average Wt./Gal.: 7.95
Vinyl compatible long oil soya. Meets requirements for TT-R-266D, Type I, Class C, Solvent M.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Long Oil(Continued):

305-70X:
NV %: 70
Solvent: Xylol
Viscosity (G-H): O-S
Reduced Visc.: C-F
Visc. % NV Reducer: 60 Xylol
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Soya
Average Wt./Gal.: 8.05
Vinyl compatible long oil soya. Meets requirements for TT-R-266D, Type I, Class C, Solvent X.

308-100:
NV %: 100
Viscosity (G-H): W-Y
Acid Value (Solids) (Max.): 10-15
Color (Max.): 7
% PA (Min.): IPA Present
Type Oil: TOFA
Average Wt./Gal.: 8.30
Latex modifier. Exterior house paints.

310-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): T-V
Reduced Visc.: B-D
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 23
Type Oil: Soya
Average Wt./Gal.: 7.50
Quality non-yellowing and non-penetrating enamels.

317-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): U-W
Reduced Visc.: C-F
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 6
Color (Max.): 10
Type Oil: Soya
Average Wt./Gal.: 8.30
Chlorinated alkyd.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Long Oil(Continued):

328-90M:
NV %: 90
Solvent: MS
Viscosity (G-H): R-V
Acid Value (Solids) (Max.): 10
Color (Max.): 8
% PA (Min.): 12
Type Oil: Linseed
Average Wt./Gal.: 8.10
Flexible long oil for exterior paints.

329-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): T-W
Reduced Visc.: C-F
Visc. % NV Reducer: 50MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: TOFA
Average Wt./Gal.: 7.75
TOFA version of 300-60M SUPER ALKYD. Lower solids version of 329-70M.

329-70M:
NV %: 70
Solvent: MS
Viscosity (G-H): Z4-Z6
Reduced Visc.: C-F
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: TOFA
Average Wt./Gal.: 8.00
Long oil TOFA. Meets requirements for TT-R-266D, Type V. TOFA version of 300-70M.

332-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): X-Z
Reduced Visc.: G-I
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Soya
Average Wt./Gal.: 7.75
Higher viscosity version of 300-60M for architectural enamels.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Long Oil(Continued):

345-100:
NV %: 100
Viscosity (G-H): W-Y
Acid Value (Solids) (Max.): 10-15
Color (Max.): 7
% PA (Min.): IPA Present
Type Oil: Soya
Average Wt./Gal.: 8.30
Latex modifier. Exterior house paint.

354-55M:
NV %: 55
Solvent: MS
Viscosity (G-H): T-W
Reduced Visc.: M-N
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Soya
Average Wt./Gal.: 7.70
Lower solids version of 332-60M for ease of handling.

362-60MO:
NV %: 60
Solvent: OMS
Viscosity (G-H): V-W
Reduced Visc.: E-F
Visc. % NV Reducer: 50 OMS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 24
Type Oil: Soya
Average Wt./Gal.: 7.65
General purpose odorless long oil alkyd.

363-90M:
NV %: 90
Solvent: MS
Viscosity (G-H): W-Y
Acid Value (Solids) (Max.): 10
Color (Max.): 8
% PA (Min.): IPA Present
Type Oil: Mixed Drying
Average Wt./Gal.: 8.10
Flexible long oil for exterior coatings and a latex modifier.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Long Oil(Continued):

366-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): T-V
Reduced Visc.: C-F
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Linseed
Average Wt./Gal.: 7.75
Long oil linseed. Meets requirements for TT-R-266D, Type II, Class B.

366-70M:
NV %: 70
Solvent: MS
Viscosity (G-H): Z-Z2
Reduced Visc.: C-F
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Linseed
Average Wt./Gal.: 7.95
Long oil linseed. Meets requirements for TT-R-266D, Type II, Class A.

367-55MO:
NV %: 55
Solvent: OMS
Viscosity (G-H): X-Z
Reduced Visc.: R-T
Visc. % NV Reducer: 50 OMS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: Soya
Average Wt./Gal.: 7.60
Odorless version of 332-60M with lower solids for ease of handling.

368-55M:
NV %: 55
Solvent: MS
Viscosity (G-H): W-X
Reduced Visc.: D-F
Visc. % NV Reducer: 45 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: TOFA
Average Wt./Gal.: 7.70
TOFA version of 354-55M.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Long Oil(Continued):

377-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): W-Y
Reduced Visc.: E-G
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 23
Type Oil: TOFA
Average Wt./Gal.: 7.75
Higher viscosity version of 329-60M. TOFA version of 332-60M.

483-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): Z-Z2
Reduced Visc.: K-N
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 24
Type Oil: Soya
Average Wt./Gal.: 7.80
Higher viscosity version of 332-60M.

601-70M:
NV %: 70
Solvent: MS
Viscosity (G-H): R-V
Acid Value (Solids) (Max.): 28-36
Color (Max.): 11
% PA (Min.): Present
Type Oil: Mixed Drying
Average Wt./Gal.: 7.95
Oxidizing binder designed for deflocculating and wetting of pigments.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Flat Alkyds:

486-30P:
NV %: 30
Solvent: SOL 140
Viscosity (G-H): T-W
Reduced Visc.: D-G
Visc. % NV Reducer: 25 SOL 140
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 31
Type Oil: Soya
Average Wt./Gal.: 7.15
Low odor flat designed for maximum non-penetration.

499-30M:
NV %: 30
Solvent: MS
Viscosity (G-H): X-Z
Reduced Visc.: L-O
Visc. % NV Reducer: 25 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 33
Type Oil: Soya
Average Wt./Gal.: 7.15
Higher viscosity and more economical (M. sp.) version of 486-30P.

608-30M:
NV %: 30
Solvent: MS
Viscosity (G-H): U-V
Reduced Visc.: C-F
Visc. % NV Reducer: 25 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 36
Type Oil: TOFA
Average Wt./Gal.: 7.05
A non-penetrating alkyd that allows high pigment loading.

610-35M:
NV %: 35
Solvent: MS
Viscosity (G-H): W-Y
Reduced Visc.: G-K
Visc. % NV Reducer: 30 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 36
Type Oil: TOFA
Average Wt./Gal.: 7.20
A medium viscosity version of 608-30M with excellent hold-out properties.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Flat Alkyds(Continued):

619-30M:
NV %: 30
Solvent: MS
Viscosity (G-H): X-Z
Reduced Visc.: L-O
Visc. % NV Reducer: 25 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 36
Type Oil: Soya
Average Wt./Gal.: 7.05
Maximum non-penetrating flat with best excellent economy due to its high reduced viscosity.

701-35MO:
NV %: 35
Solvent: OMS
Viscosity (G-H): Z4-Z6
Reduced Visc.: R-U
Visc. % NV Reducer: 25 OMS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 34
Type Oil: TOFA
Average Wt./Gal.: 7.10
A high viscosity odorless flat with excellent non-penetration.

703-35MO:
NV %: 35
Solvent: OMS
Viscosity (G-H): V-X
Reduced Visc.: H-J
Visc. % NV Reducer: 30 OMS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 29
Type Oil: TOFA
Average Wt./Gal.: 7.05
Odorless flat vehicle with good non-penetration and excellent compatibility.

707-30MO:
NV %: 30
Solvent: OMS
Viscosity (G-H): Z-Z2
Reduced Visc.: R-U
Visc. % NV Reducer: 25 OMS
Acid Value (Solids) (Max.): 10
Color (Max.): 6
% PA (Min.): 34
Type Oil: TOFA
Average Wt./Gal.: 7.00
Lower viscosity version of 701-35MO for ease of handling.

THIBAUT & WALKER: Alkyd Resins(Continued):

SUPER ALKYD Flat Alkyds(Continued):

708-40M:
NV %: 40
Solvent: MS
Viscosity (G-H): Z-Z2
Reduced Visc.: C-F
Visc. % NV Reducer: 30 MS
Acid Value (Solids) (Max.): 10
Color (Max): 6
% PA (Min.): 35
Type Oil: TOFA
Average Wt./Gal.: 7.30
Interior flats and Shake and Shingle paints.

709-40M:
NV %: 40
Solvent: MS
Viscosity (G-H): X-Z
Reduced Visc.: A-D
Visc. % NV Reducer: 30 MS
Acid Value (Solids) (Max.): 25-35
Color (Max.): 6
% PA (Min.): 37
Type Oil: TOFA
Average Wt./Gal.: 7.40
Non-penetrating flats, and Shake and Shingle paints.

THIBAUT & WALKER: SUPER ALKYD Modified-Oxidizing Alkyds:

346-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): V-Y approx.
Reduced Visc.: G-K
Visc. % NV Reducer: 50 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 7
% PA (Min.): 14
Type Oil: Soya
Average Wt./Gal.: 7.90
Modifier: Silicone
Meets TT-E-490C and TT-E-1593B.

420-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): W-Y
Reduced Visc.: E-H
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 14-20
Color (Max.): 10
% PA (Min.): 24
Type Oil: Mixed Drying
Average Wt./Gal.: 7.60
Modifier: Rosin/Phenol
Phenolated medium oil for abrasion resistance.

439-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): T-W
Reduced Visc.: A-D
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10-18
Color (Max.): 10
% PA (Min.): 21
Type Oil: Soya/Linseed
Average Wt./Gal.: 7.50
Modifier: Rosin
General purpose vehicle to enhance gloss and dry.

THIBAUT & WALKER: SUPER ALKYD Modified-Oxidizing Alkyds (Continued):

441-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): I-K
Acid Value (Solids) (Max.): 10
Color (Max.): 6
Type Oil: Soya
Average Wt./Gal.: 7.60
Modifier: Epoxy
Epoxy ester for fast dry toughness, adhesion and chemical resistance.

442-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): L-N
Acid Value (Solids) (Max.): 10
Color (Max.): 6
Type Oil: Linseed
Average Wt./Gal.: 7.60
Modifier: Epoxy
Linseed version of 441-50M, with equal properties.

475-50M:
NV %: 50
Solvent: MS
Viscosity (G-H): T-V
Reduced Visc.: A-D
Visc. % NV Reducer: 40 MS
Acid Value (Solids) (Max.): 10
Color (Max.): 8
% PA (Min.): 24
Type Oil: TOFA
Average Wt./Gal.: 7.60
Modifier: Rosin
Gloss, dry and hardness enhancer.

549-38S:
NV %: 38
Solvent: MS
Viscosity (G-H): Q-T
Reduced Visc.: A-D
Visc. % NV Reducer: 30 MS
Acid Value (Solids) (Max.): 25-35
Color (Max.): 7
% PA (Min.): 25
Type Oil: TOFA
Average Wt./Gal.: 7.35
Modifier: Rosin
For use in spackling compound.

THIBAUT & WALKER: SUPER ALKYD Modified-Oxidizing Alkyds (Continued):

566-45V:
NV %: 45
Solvent: VMP
Viscosity (G-H): Z1-Z3
Reduced Visc.: R-U
Visc. % NV Reducer: 35 VMP
Acid Value (Solids) (Max.): 20
Color (Max.): 9
% PA (Min.): 26
Type Oil: TOFA
Average Wt./Gal.: 7.45
Modifier: Rosin-Ester
Fast dry drum and toy enamel. Tannin stain blockers, floor and wood sealers.

567-50VT:
NV %: 50
Solvent: VMP
Toluol (Exempt Blend)
Viscosity (G-H): X-Y
Reduced Visc.: L-M
A-B
Visc. % NV Reducer: 40 VMP
40 Xylol
Acid Value (Solids) Max.: 20
Color (Max.): 9
% PA (Min.): 20
Type Oil: TOFA
Average Wt./Gal.: 7.50
Modifier: Rosin-Ester
Economical alternative to fast dry phenolated alkyds while retaining similar properties. Drum & toy enamels. Tannin stain blocker.

614-45M:
NV %: 45
Solvent: MS
Viscosity (G-H): Z1-Z4
Reduced Visc.: V-X
Visc. % NV Modifier: 40 MS
Acid Value (Solids) (Max.): 26
Color (Max.): 9
% PA (Min.): 32
Type Oil: Mixed Drying
Average Wt./Gal.: 7.65
Modifier: Rosin
Medium-short oil with good flexibility. Gloss and dry enhancer.

THIBAUT & WALKER: SUPER-ALKYD Modified-Oxidizing Alkyds (Continued):

650-60M:
NV %: 60
Solvent: MS
Viscosity (G-H): Z1-Z3
Acid Value (Solids) (Max.): 10
Color (Max.): 7
Type Oil: TOFA
Average Wt./Gal.: 7.80
Modifier: Epoxy
Higher solids TOFA version of 441 or 442-50M.

LV3045-45MD:
NV %: 45
Solvent: MS
Viscosity (G-H): A5-A
Acid Value (Solids) (Max.): 5
Color (Max.): 16
Type Oil: Drying
Average Wt./Gal.: 7.30
Modifier: Hydrocarbon Resin
Aluminum vehicle for interior and exterior use.